

Sequence Listing

- <110> Eaton, Dan L.
Filvaroff, Ellen
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.
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 Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu

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Leu Val Leu Ala	Leu Leu Phe Phe Gly	Ala Ala Ala Gly Leu	Gly
	245	250	255
Phe Cys Tyr Val	Lys Arg Tyr Val Lys	Ala Phe Pro Phe Thr	Asn
	260	265	270
Lys Asn Gln Gln	Lys Glu Met Ile Glu	Thr Lys Val Val Lys	Glu
	275	280	285
Glu Lys Ala Asn	Asp Ser Asn Pro Asn	Glu Glu Ser Lys Lys	Thr
	290	295	300
Asp Lys Asn Pro	Glu Glu Ser Lys Ser	Pro Ser Lys Thr Thr	Val
	305	310	315
Arg Cys Leu Glu	Ala Glu Val		
	320		

<210> 7
 <211> 2586
 <212> DNA
 <213> Homo Sapien

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 ccgcagcgca actcggtcca gtcggggcgg cggctgcggg cgcagagcgg 150
 agatgcagcg gcttggggcc accctgctgt gctgctgct ggcggcggcg 200
 gtccccacgg ccccgcgcc cgctccgacg gcgacctcgg ctccagtcaa 250
 gcccggcccc gctctcagct accgcagga ggaggccacc ctcaatgaga 300
 tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350
 agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400
 agaagtgaac ctggcaact tacctcccag ctatcacaat gagaccaaca 450
 cagacacgaa ggttggaat aataccatcc atgtgcaccg agaaattcac 500
 aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550
 cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcgc 600
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 tgcccagaga ggtccccgat gagtatgaag ttggcagctt catggaggag 1100
 gtgcgccagg agctggagga cctggagagg agcctgactg aagagatggc 1150
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 tttagatctg gaccaggctg tgggtagatg tgcaatagaa atagctaatt 1250
 tatttcccca ggtgtgtgct ttaggcgtgg gctgaccagg cttcttcta 1300
 catcttcttc ccagtaagtt tcccctctgg cttgacagca tgagggtgtg 1350
 tgcatttggt cagctcccc aggctgttct ccaggcttca cagtctggtg 1400
 cttgggagag tcaggcaggg ttaaactgca ggagcagttt gccaccctg 1450
 tccagattat tggctgcttt gcctctacca gttggcagac agccgtttgt 1500
 tctacatggc tttgataatt gtttgagggg aggagatgga aacaatgtgg 1550
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 tctctcagca cagcctgggg aggggggtcat tgttctctc gtccatcagg 1850
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 gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtctt 1950
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 aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100
 gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150
 cactgtccct ctttggcagt tgcattagta actttgaaag gtatatgact 2200
 gagcgtagca tacagggttaa cctgcagaaa cagtacttag gtaattgtag 2250

ggcgaggatt ataaatgaaa ttgcaaaat cacttagcag caactgaaga 2300
 caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350
 atgggtgttaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400
 tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450
 tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500
 tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550
 cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8
 <211> 350
 <212> PRT
 <213> Homo Sapien

<400> 8
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 20 25 30
 Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala
 35 40 45
 Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
 50 55 60
 Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
 65 70 75
 Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu
 80 85 90
 Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr Lys Val Gly
 95 100 105
 Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile Thr Asn
 110 115 120
 Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr Ser
 125 130 135
 Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp
 140 145 150
 Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln
 155 160 165
 Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg
 170 175 180
 Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys
 185 190 195

Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn	
				200					205					210	
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly	
				215					220					225	
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu	
				230					235					240	
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu	
				245					250					255	
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly	
				260					265					270	
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys	
				275					280					285	
Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	Asp	Gly	Glu	Ile	Leu	Leu	
				290					295					300	
Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu	
				305					310					315	
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu	
				320					325					330	
Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu	Leu	
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Gly	Gly	Glu	Glu	Ile											
				350											

<210> 9
 <211> 1395
 <212> DNA
 <213> Homo Sapien

<400> 9
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 ttcaatctgc aaatctatgg ggtcctgggg ctcttctgga cccttaactg 200
 ggtactggcc ctgggccaat gcgtcctcgc tggagccttt gcctccttct 250
 actgggcctt ccacaagccc caggacatcc ctaccttccc cttaatctct 300
 gccttcatcc gcacactccg ttaccacact gggtcattgg catttggagc 350
 cctcatcctg acccttgtgc agatagcccg ggtcatcttg gagtatattg 400
 accacaagct cagaggagtg cagaacctg tagcccgcgtg catcatgtgc 450
 tgtttcaagt gctgcctctg gtgtctggaa aaatttatca agttcctaaa 500

ccgcaatgca tacatcatga tcgccatcta cggaagaat ttctgtgtct 550
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 gtcctggaca aagtcacaga cctgctgctg ttctttggga agctgctggc 650
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 cggggctggg taaagacttt aagagccccc acctcaacta ttactggctg 750
 cccatcatga cctccatcct gggggcctat gtcacgcca ggggcttctt 800
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 agccttctaa agattctggg caagaagaac gaggcgcccc cggacaacaa 950
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 acactttgag aggtgaggc gggcggtatc cctgagtcag gagttcgaga 1150
 ccagcctggc caacatggtg aaacctccgt ctctattaaa aatacaaaaa 1200
 ttagccgaga gtggtggcat gcacctgtca tcccagctac tcgggaggct 1250
 gaggcaggag aatcgcttga acccgaggag cagagggtgc agtgagccga 1300
 gatcgcgcca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350
 aaacaaacaa acaaaaagat tttattaaag atattttgtt aactc 1395

<210> 10
 <211> 321
 <212> PRT
 <213> Homo Sapien

<400> 10
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 Asn Thr Ser Cys Asn Pro Thr Ala His Leu Val Asn Ser Ser Cys
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 Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
 35 40 45
 Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
 50 55 60
 Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
 65 70 75
 Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro

80										85					90				
Gln	Asp	Ile	Pro	Thr	Phe	Pro	Leu	Ile	Ser	Ala	Phe	Ile	Arg	Thr					
									100					105					
				95															
Leu	Arg	Tyr	His	Thr	Gly	Ser	Leu	Ala	Phe	Gly	Ala	Leu	Ile	Leu					
				110					115					120					
Thr	Leu	Val	Gln	Ile	Ala	Arg	Val	Ile	Leu	Glu	Tyr	Ile	Asp	His					
				125					130					135					
Lys	Leu	Arg	Gly	Val	Gln	Asn	Pro	Val	Ala	Arg	Cys	Ile	Met	Cys					
				140					145					150					
Cys	Phe	Lys	Cys	Cys	Leu	Trp	Cys	Leu	Glu	Lys	Phe	Ile	Lys	Phe					
				155					160					165					
Leu	Asn	Arg	Asn	Ala	Tyr	Ile	Met	Ile	Ala	Ile	Tyr	Gly	Lys	Asn					
				170					175					180					
Phe	Cys	Val	Ser	Ala	Lys	Asn	Ala	Phe	Met	Leu	Leu	Met	Arg	Asn					
				185					190					195					
Ile	Val	Arg	Val	Val	Val	Leu	Asp	Lys	Val	Thr	Asp	Leu	Leu	Leu					
				200					205					210					
Phe	Phe	Gly	Lys	Leu	Leu	Val	Val	Gly	Gly	Val	Gly	Val	Leu	Ser					
				215					220					225					
Phe	Phe	Phe	Phe	Ser	Gly	Arg	Ile	Pro	Gly	Leu	Gly	Lys	Asp	Phe					
				230					235					240					
Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser					
				245					250					255					
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe					
				260					265					270					
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu					
				275					280					285					
Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys					
				290					295					300					
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp					
				305					310					315					
Asn	Lys	Lys	Arg	Lys	Lys														
				320															

<210> 11

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 11

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ctctgcccc tgcctcctgt gcagctgctg ccccgccagc cgcaactcca 150
ccgtgagccg cctcatcttc acgttcttcc tcttcctggg ggtgctgggtg 200
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 ctgagtctct aagacttttt ctaataaaca agccagtgcg tgtaaaaaaa 1900
 a 1901

<210> 12
 <211> 457
 <212> PRT
 <213> Homo Sapien

<400> 12
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 Cys Leu Cys Gly Ser Ala Pro Cys Ile Leu Cys Ser Cys Cys Pro
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 Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe
 35 40 45
 Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly
 50 55 60
 Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly
 65 70 75
 Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser
 80 85 90
 Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala
 95 100 105
 Ala Phe Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser
 110 115 120
 Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe
 125 130 135
 Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr
 140 145 150
 Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val
 155 160 165
 Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile

170										175					180				
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu					
				185					190					195					
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr					
				200					205					210					
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe					
				215					220					225					
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe					
				230					235					240					
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala					
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Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu					
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Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser					
				275					280					285					
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro					
				290					295					300					
Thr	Gln	Leu	Gly	Asn	Glu	Thr	Val	Val	Ala	Gly	Pro	Glu	Gly	Tyr					
				305					310					315					
Glu	Thr	Gln	Trp	Trp	Asp	Ala	Pro	Ser	Ile	Val	Gly	Leu	Ile	Ile					
				320					325					330					
Phe	Leu	Leu	Cys	Thr	Leu	Phe	Ile	Ser	Leu	Arg	Ser	Ser	Asp	His					
				335					340					345					
Arg	Gln	Val	Asn	Ser	Leu	Met	Gln	Thr	Glu	Glu	Cys	Pro	Pro	Met					
				350					355					360					
Leu	Asp	Ala	Thr	Gln	Gln	Gln	Gln	Gln	Gln	Val	Ala	Ala	Cys	Glu					
				365					370					375					
Gly	Arg	Ala	Phe	Asp	Asn	Glu	Gln	Asp	Gly	Val	Thr	Tyr	Ser	Tyr					
				380					385					390					
Ser	Phe	Phe	His	Phe	Cys	Leu	Val	Leu	Ala	Ser	Leu	His	Val	Met					
				395					400					405					
Met	Thr	Leu	Thr	Asn	Trp	Tyr	Lys	Pro	Gly	Glu	Thr	Arg	Lys	Met					
				410					415					420					
Ile	Ser	Thr	Trp	Thr	Ala	Val	Trp	Val	Lys	Ile	Cys	Ala	Ser	Trp					
				425					430					435					
Ala	Gly	Leu	Leu	Leu	Tyr	Leu	Trp	Thr	Leu	Val	Ala	Pro	Leu	Leu					
				440					445					450					
Leu	Arg	Asn	Arg	Asp	Phe	Ser													
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<210> 13
<211> 1572
<212> DNA
<213> Homo Sapien

<400> 13
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tgaaccacct gccagaagac atggagaacg ctctcaccgg gagccagagc 150
tcccatgctt ctctgcgcaa tatccattcc atcaacccca cacaactcat 200
ggccaggatt gagtcctatg aaggaaggga aaagaaaggc atatctgatg 250
tcaggaggac tttctgtttg tttgtcacct ttgacctctt attcgtaaca 300
ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350
agagaaggag gtgatgcagt atgactacta ttcttcatat tttgatatat 400
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tgcagactgc gccattgggtg ggcaatagcg ttgacaacgg cagtgaccag 500
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cttttggtta tgtgctgccc atcatttcat tcaccttgc ctggattgag 600
acgtggttcc tggatttcaa agtggtacct caagaagcag aagaagaaaa 650
cagactcctg atagtccagg atgcttcaga gagggcagca cttatacctg 700
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tctgaagaag ctgaagaaaa acaggacagt gagaaaccac ttttagaact 800
atgagtacta cttttgttaa atgtgaaaaa ccctcacaga aagtcacga 850
ggcaaaaaga ggcaggcagt ggagtctccc tgtcgacagt aaagttgaaa 900
tggtgacgtc cactgctggc tttattgaac agctaataaa gatttattta 950
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gcctgtggct ggtaaggtaa tgtcatgatt catcctctct tcagtgagac 1050
tgagcctgat gtgttaacaa atagggtgaag aaagtcttgt gctgtattcc 1100
taatcaaaag acttaatata ttgaagtaac acttttttag taagcaagat 1150
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atttattttg tatttctttt ttaacactct acatttccct tgttttttta 1250
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acatgtcaat gtggctagtt ttatttttct tgttttgcac tatgtgtatg 1350
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 gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450
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 ttaaaatgaa ctaaattaaa aa 1572

<210> 14
 <211> 234
 <212> PRT
 <213> Homo Sapien

<400> 14
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 Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro
 20 25 30
 Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys
 35 40 45
 Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr
 50 55 60
 Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn
 65 70 75
 Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln
 80 85 90
 Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val
 95 100 105
 Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu
 110 115 120
 Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala
 125 130 135
 Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly
 140 145 150
 Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp
 155 160 165
 Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala
 170 175 180
 Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg
 185 190 195
 Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser

	200	205	210
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln			
	215	220	225
Asp Ser Glu Lys Pro Leu Leu Glu Leu			
	230		

<210> 15
 <211> 2768
 <212> DNA
 <213> Homo Sapien

<400> 15
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 ccgcctcccg ggacagaaga tgtgctccag ggtccctctg ctgctgccgc 150
 tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200
 tgccagtgcg gccagccaca gacagtcttc tgcactgccg gccaggggac 250
 cacggtgccc cgagacgtgc caccgcacac ggtggggctg tacgtctttg 300
 agaacggcat caccatgctc gacgcaggca gctttgccgg cctgccgggc 350
 ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400
 ggtcttccag ccactcgcca acctcagcaa cctggacctg acggccaaca 450
 ggctgcatga aatcaccaat gagaccttcc gtggcctgcg gcgcctcgag 500
 cgctcttacc tgggcaagaa ccgcattccg cacatccagc ctggtgcctt 550
 cgacacgctc gaccgcctcc tggagctcaa gctgcaggac aacgagctgc 600
 gggcactgcc cccgctgcgc ctgccccgcc tgctgctgct ggacctcagc 650
 cacaacagcc tcctggccct ggagcccggc atcctggaca ctgccaacgt 700
 ggaggcgctg cggttggtg gtctggggct gcagcagctg gacgaggggc 750
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 cctgggtgcg cgagagccac gtcacactgg ccagccctga ggagacgcgc 1100

tgccacttcc cgcccaagaa cgctggccgg ctgctcctgg agcttgacta 1150
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 cgtccacctg cctcaatggg ggcacatgcc acctggggac acggcaccac 1400
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 gatggggcag gggacacggc ccagccctac accagtcacg ccgaggccac 1500
 cacggtccct gaccctgggc atcgagccgg tgagccccac ctccctgcgc 1550
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 ccgtctcacc tategcaacc tategggccc tgataagcgg ctggtgacgc 1650
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 aacgccactt actccgtctg tgtcatgctt ttggggcccg ggcgggtgcc 1750
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 cagtccttgg gcacggcggg ccctgccatg tgctggtaac gcatgcctgg 2450
 gtctctgctg gctctccac tccaggcgga ccctgggggc cagtgaagga 2500
 agtccccgga aagagcagag ggagagcggg taggcggctg tgtgactcta 2550

gtcttgcccc caggaagcga aggaacaaaa gaaactggaa aggaagatgc 2600
 ttttaggaaca tgttttgctt ttttaaaata tatatatatta taagagatcc 2650
 tttcccatatt attctgggaa gatgtttttc aaactcagag acaaggactt 2700
 tgggtttttgt aagacaaacg atgatatgaa ggcctttttgt aagaaaaaat 2750
 aaaagatgaa gtgtgaaa 2768

<210> 16
 <211> 673
 <212> PRT
 <213> Homo Sapien

<400> 16
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 Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys
 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45
 Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
 50 55 60
 Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu
 65 70 75
 Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
 80 85 90
 Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu
 95 100 105
 Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe
 110 115 120
 Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg
 125 130 135
 Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu
 140 145 150
 Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro
 155 160 165
 Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
 170 175 180
 Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu
 185 190 195
 Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly
 200 205 210

Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp
 215 220 225
 Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly
 230 235 240
 Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu
 245 250 255
 Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp
 260 265 270
 Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly
 275 280 285
 Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe
 290 295 300
 Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu
 305 310 315
 Ser His Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe
 320 325 330
 Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala
 335 340 345
 Asp Phe Gly Cys Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr
 350 355 360
 Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu
 365 370 375
 Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro
 380 385 390
 Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln
 395 400 405
 Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys
 410 415 420
 His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly
 425 430 435
 Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg
 440 445 450
 Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr
 455 460 465
 Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu
 470 475 480
 Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg
 485 490 495
 Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr

	500	505	510
Leu Arg Leu Pro	Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu		
	515	520	525
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro			
	530	535	540
Gly Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr			
	545	550	555
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg			
	560	565	570
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val			
	575	580	585
Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg			
	590	595	600
Arg Gly Arg Ala Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val			
	605	610	615
Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro			
	620	625	630
Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu			
	635	640	645
Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly			
	650	655	660
Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile			
	665	670	

<210> 17
 <211> 1672
 <212> DNA
 <213> Homo Sapien

<400> 17
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 tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat 150
 gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
 ccatactact gcaggcagag tagttgctgg tcaaatttt cttgattcag 250
 aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
 agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350
 aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaaccag 400
 ctttgaccgc cattgaaggc acagcacatg gggagccctg ccaattccct 450

tttcttttcc tagataagga gtatgatgaa tgtacatcag atgggagggga 500
 agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550
 agtgggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600
 caggaagcag aaatgatgta tcaaactgga atgaaaatcc ttaatggaag 650
 caataagaaa agccaaaaaa gagaagcata tcggtatctc caaaaggcag 700
 caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctctttta 750
 tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800
 gaagctgact gaggaaggct ctcccaaggg acagactgct cttggctttc 850
 tgtatgcctc tggacttggg gttaattcaa gtcaggcaaa ggctcttgta 900
 tattatacat ttggagctct tgggggcaat ctaatagccc acatggtttt 950
 ggtaagtaga ctttagtgga aggctaataa tattaacatc agaagaattt 1000
 gtggtttata gcggccacaa ctttttcagc tttcatgac cagatttgct 1050
 tgtattaaga ccaaattatc agttgaactt ctttcaaatt cttgttaatg 1100
 gatataacac atggaatcta catgtaaag aaagttgggt gagtccacaa 1150
 tttttcttta aaatgattag tttggctgat tgcccctaaa aagagagatc 1200
 tgataaatgg ctctttttta attttctctg agttggaatt gtcagaatca 1250
 ttttttacat tagattatca taattttaaa aatttttctt tagtttttca 1300
 aaattttgta aatggtggct atagaaaaac aacatgaaat attatacaat 1350
 attttgcaac aatgccttaa gaattgttaa aattcatgga gttatttggtg 1400
 cagaatgact ccagagagct ctactttctg ttttttactt ttcattgattg 1450
 gctgtcttcc cattttattct ggtcatttat tgctagtgtac actgtgcctg 1500
 cttccagtag tctcattttc cctattttgc taatttggtta ctttttcttt 1550
 gctaatttgg aagatttaact catttttaat aaaattatgt ctaagattaa 1600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 18
 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu
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Leu	Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Glu	Gly	Ser	Gln	Asp	
				20					25					30	
Glu	Ser	Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	
				35					40					45	
Lys	Asp	His	Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	
				50					55					60	
Leu	Asp	Ser	Glu	Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	
				65					70					75	
Glu	Asp	Ser	Leu	Lys	Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	
				80					85					90	
Ile	Ser	Phe	Leu	Glu	Ser	Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu	
				95					100					105	
Glu	Pro	Lys	Lys	Val	Arg	Lys	Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly	
				110					115					120	
Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp	
				125					130					135	
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg	
				140					145					150	
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp	
				155					160					165	
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met	
				170					175					180	
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn	
				185					190					195	
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu	
				200					205					210	
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val	
				215					220					225	
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	
				230					235					240	
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	
				245					250					255	
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	
				260					265					270	
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	
				275					280					285	
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg	
				290					295					300	

Leu

<210> 19
<211> 1508
<212> DNA
<213> Homo Sapien

<400> 19
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agggggaaaa atgctctttt gggtgctagg cctcctaata ctctgtgggt 150
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
tacattttta tcaactggatg tgactcgggc tttggaaact tggcagccag 250
aacttttgat aaaaagggat ttcagtgaat cgctgcctgt ctgactgaat 300
caggatcaac agctttaaag gcagaaacct cagagagact tcgtactgtg 350
cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aagggtctctg ggggtctgatc aataatgctg 450
gtgttcccg cgtgctggct cccactgact ggctgacact agaggactac 500
agagaaccta ttgaagtga cctgtttgga ctcactcagt tgacactaaa 550
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tggtgtgcac gtctcatgca ttgaaccagg attgttcaaa acaaacttgg 750
cagatccagt aaaggttaatt gaaaaaaaaac tcgccatttg ggagcagctg 800
tctccagaca tcaaacaaca atatggagaa gggttacattg aaaaaagtct 850
agacaaactg aaaggcaata aatcctatgt gaacatggac ctctctccgg 900
tggtagagtg catggaccac gctctaacaa gtctcttccc taagactcat 950
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tatgaaattg gccgatttca agaacacatc tccttttcaa ccccatctct 1150
tatctgctcc aacctggact catttagatc gtgcttattt ggattgcaaa 1200
agggagtccc accatcgctg gtggtatccc agggtccttg ctcaagtttt 1250
ctttgaaaag gagggctgga atggtacatc acataggcaa gtcctgccct 1300

gtatttaggc tttgctgct tgggtgatg taagggaat tgaaagactt 1350
 gcccatcaca aatgatcttt accgtggcct gcccatgct tatgggtccc 1400
 agcatttaca gtaacttggt aatgttaagt atcatctctt atctaaatat 1450
 taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
 aaaaaaaaa 1508

<210> 20
 <211> 319
 <212> PRT
 <213> Homo Sapien

<400> 20
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 Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys
 20 25 30
 Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala
 35 40 45
 Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys
 50 55 60
 Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu
 65 70 75
 Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val
 80 85 90
 Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly
 95 100 105
 Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala
 110 115 120
 Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu
 125 130 135
 Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro
 140 145 150
 Leu Val Lys Lys Ala Gln Gly Arg Val Ile Asn Val Ser Ser Val
 155 160 165
 Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr Thr Pro Ser Lys
 170 175 180
 Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg Asp Met Lys
 185 190 195
 Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu Phe Lys
 200 205 210

Thr	Asn	Leu	Ala	Asp	Pro	Val	Lys	Val	Ile	Glu	Lys	Lys	Leu	Ala	
				215					220					225	
Ile	Trp	Glu	Gln	Leu	Ser	Pro	Asp	Ile	Lys	Gln	Gln	Tyr	Gly	Glu	
				230					235					240	
Gly	Tyr	Ile	Glu	Lys	Ser	Leu	Asp	Lys	Leu	Lys	Gly	Asn	Lys	Ser	
				245					250					255	
Tyr	Val	Asn	Met	Asp	Leu	Ser	Pro	Val	Val	Glu	Cys	Met	Asp	His	
				260					265					270	
Ala	Leu	Thr	Ser	Leu	Phe	Pro	Lys	Thr	His	Tyr	Ala	Ala	Gly	Lys	
				275					280					285	
Asp	Ala	Lys	Ile	Phe	Trp	Ile	Pro	Leu	Ser	His	Met	Pro	Ala	Ala	
				290					295					300	
Leu	Gln	Asp	Phe	Leu	Leu	Leu	Lys	Gln	Lys	Ala	Glu	Leu	Ala	Asn	
				305					310					315	

Pro Lys Ala Val

<210> 21
 <211> 1849
 <212> DNA
 <213> Homo Sapien

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 acggaagggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
 gaagtaaatg agcaagcact gaagaaaata ttatcaaagc tcaaaaagaa 300
 tgtggtaggt tggtacaaat tccgtcgtca ttcagatcag atcatgacgt 350
 ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccac 400
 gaccttggtt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
 acagggtacc tttagtgggt gccaatctgg gcatgtctga acaactgggt 550
 tataaaactg tatcaggttc ctgtatgtcc actggtttta gccgagcagt 600
 acaaacacac agctctaaat tttttgaaga agatggatcc ttaaaggagg 650
 tacataagat aaatgaaatg tatgcttcat tacaagagga attaaagagt 700

atatgcaaaa aagtggaaga cagtgaacaa gcagtagata aactagtaaa 750
 ggatgtaaac agattaaaac gagaaattga gaaaaggaga ggagcacaga 800
 ttcaggcagc aagagagaag aacatccaaa aagaccctca ggagaacatt 850
 tttctttgtc aggcattacg gacctttttt ccaaattctg aatttcttca 900
 ttcattgtgtt atgtcttttaa aaaatagaca tgtttctaaa agtagctgta 950
 actacaacca ccatctcgat gtagtagaca atctgacott aatggtagaa 1000
 cacactgaca ttcctgaagc tagtccagct agtacaccac aaatcattaa 1050
 gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggg 1100
 tgtagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
 caagataaag catccaaaat gagcagccca gaaacagatg aagaaattga 1200
 aaagatgaag ggttttgggtg aatattcacg gtctcctaca ttttgatcct 1250
 ttttaacctta caaggagatt tttttatttg gctgatgggt aaagccaaac 1300
 atttctattg tttttactat gttgagctac ttgcagtaag ttcatttggt 1350
 tttactatgt tcacctgttt gcagtaatac acagataact cttagtgcatt 1400
 ttacttcaca aagtactttt tcaaacatca gatgctttta tttccaaacc 1450
 tttttttcac ctttctactaa gttgttgagg ggaaggctta cacagacaca 1500
 ttcttttagaa ttggaaaagt gagaccaggc acagtggctc acacctgtaa 1550
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 tagagaccag cctgggcaac gtattgagac catgtctatt aaaaaataaa 1650
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 aagtacatta tggctagagt tgccagataa aatgctggat atcatgcaat 1800
 aaatttgcaa aacatcatct aaaattttaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

<400> 22

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Gly	Ala	Leu	Ala	Phe	Gln	His	Leu	Asn	Thr	Asp	Ser	Asp	Thr	Glu
				20					25					30

Gly	Phe	Leu	Leu	Gly	Glu	Val	Lys	Gly	Glu	Ala	Lys	Asn	Ser	Ile		35	40	45
Thr	Asp	Ser	Gln	Met	Asp	Asp	Val	Glu	Val	Val	Tyr	Thr	Ile	Asp		50	55	60
Ile	Gln	Lys	Tyr	Ile	Pro	Cys	Tyr	Gln	Leu	Phe	Ser	Phe	Tyr	Asn		65	70	75
Ser	Ser	Gly	Glu	Val	Asn	Glu	Gln	Ala	Leu	Lys	Lys	Ile	Leu	Ser		80	85	90
Asn	Val	Lys	Lys	Asn	Val	Val	Gly	Trp	Tyr	Lys	Phe	Arg	Arg	His		95	100	105
Ser	Asp	Gln	Ile	Met	Thr	Phe	Arg	Glu	Arg	Leu	Leu	His	Lys	Asn		110	115	120
Leu	Gln	Glu	His	Phe	Ser	Asn	Gln	Asp	Leu	Val	Phe	Leu	Leu	Leu		125	130	135
Thr	Pro	Ser	Ile	Ile	Thr	Glu	Ser	Cys	Ser	Thr	His	Arg	Leu	Glu		140	145	150
His	Ser	Leu	Tyr	Lys	Pro	Gln	Lys	Gly	Leu	Phe	His	Arg	Val	Pro		155	160	165
Leu	Val	Val	Ala	Asn	Leu	Gly	Met	Ser	Glu	Gln	Leu	Gly	Tyr	Lys		170	175	180
Thr	Val	Ser	Gly	Ser	Cys	Met	Ser	Thr	Gly	Phe	Ser	Arg	Ala	Val		185	190	195
Gln	Thr	His	Ser	Ser	Lys	Phe	Phe	Glu	Glu	Asp	Gly	Ser	Leu	Lys		200	205	210
Glu	Val	His	Lys	Ile	Asn	Glu	Met	Tyr	Ala	Ser	Leu	Gln	Glu	Glu		215	220	225
Leu	Lys	Ser	Ile	Cys	Lys	Lys	Val	Glu	Asp	Ser	Glu	Gln	Ala	Val		230	235	240
Asp	Lys	Leu	Val	Lys	Asp	Val	Asn	Arg	Leu	Lys	Arg	Glu	Ile	Glu		245	250	255
Lys	Arg	Arg	Gly	Ala	Gln	Ile	Gln	Ala	Ala	Arg	Glu	Lys	Asn	Ile		260	265	270
Gln	Lys	Asp	Pro	Gln	Glu	Asn	Ile	Phe	Leu	Cys	Gln	Ala	Leu	Arg		275	280	285
Thr	Phe	Phe	Pro	Asn	Ser	Glu	Phe	Leu	His	Ser	Cys	Val	Met	Ser		290	295	300
Leu	Lys	Asn	Arg	His	Val	Ser	Lys	Ser	Ser	Cys	Asn	Tyr	Asn	His		305	310	315
His	Leu	Asp	Val	Val	Asp	Asn	Leu	Thr	Leu	Met	Val	Glu	His	Thr				

	320		325		330
Asp Ile Pro Glu	Ala Ser Pro Ala Ser	Thr Pro Gln Ile Ile	Lys		
	335		340		345
His Lys Ala Leu	Asp Leu Asp Asp Arg	Trp Gln Phe Lys Arg	Ser		
	350		355		360
Arg Leu Leu Asp	Thr Gln Asp Lys Arg	Ser Lys Ala Asn Thr	Gly		
	365		370		375
Ser Ser Asn Gln	Asp Lys Ala Ser Lys	Met Ser Ser Pro Glu	Thr		
	380		385		390
Asp Glu Glu Ile	Glu Lys Met Lys Gly	Phe Gly Glu Tyr Ser	Arg		
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Ser Pro Thr Phe					

<210> 23
 <211> 2651
 <212> DNA
 <213> Homo Sapien

<400> 23
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 ccgcgaaacc ccgaggtcac cagccgcgc ctctgcttcc ctgggcccgc 250
 cgccgcctcc acgcctcct tctccctgg ccgggcgcct ggcaccgggg 300
 accgttgct gacgcgaggc ccagctctac ttttcgcccc gcgtctctc 350
 cgctgctcg cctcttccac caactccaac tcttctccc tccagctcca 400
 ctcgctagtc ccgactccg ccagccctcg gccgctgcc gtagcgcgc 450
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 cccgtacttt cgctcaaggc ttagcggttg cgggagatgt cgtgagcaag 1200
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 actactgctc aaacatcatg agaggctggt tggccaacca aggggatctc 1350
 gattttgaat ggaacaattt catagatgct atgctgatgg tggcagagag 1400
 gctagagggg cctttcaaca ttgaatcggg catggatccc atcgatgtga 1450
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 aatttctcgt tccatctctg aaagtgcctt cagtgtcgc ttcagaccac 1600
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 gcagagagag tggagataat tctcaaactc tgagaaaaag tgttcatcaa 2200
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 c 2651

<210> 24
 <211> 556
 <212> PRT
 <213> Homo Sapien

<400> 24
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 20 25 30
 Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn
 35 40 45
 Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys
 50 55 60
 Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr
 65 70 75
 Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln
 80 85 90
 Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe
 95 100 105
 Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu
 110 115 120
 Asn Asp Met Phe Val Lys Thr Tyr Gly His Leu Tyr Met Gln Asn
 125 130 135
 Ser Glu Leu Phe Lys Asp Leu Phe Val Glu Leu Lys Arg Tyr Tyr
 140 145 150
 Val Val Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp
 155 160 165
 Ala Arg Leu Leu Glu Arg Met Phe Arg Leu Val Asn Ser Gln Tyr

170										175					180				
His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu					
				185					190					195					
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln					
				200					205					210					
Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu					
				215					220					225					
Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro					
				230					235					240					
Thr	Ala	Gln	Cys	Thr	His	Ala	Leu	Leu	Lys	Met	Ile	Tyr	Cys	Ser					
				245					250					255					
His	Cys	Arg	Gly	Leu	Val	Thr	Val	Lys	Pro	Cys	Tyr	Asn	Tyr	Cys					
				260					265					270					
Ser	Asn	Ile	Met	Arg	Gly	Cys	Leu	Ala	Asn	Gln	Gly	Asp	Leu	Asp					
				275					280					285					
Phe	Glu	Trp	Asn	Asn	Phe	Ile	Asp	Ala	Met	Leu	Met	Val	Ala	Glu					
				290					295					300					
Arg	Leu	Glu	Gly	Pro	Phe	Asn	Ile	Glu	Ser	Val	Met	Asp	Pro	Ile					
				305					310					315					
Asp	Val	Lys	Ile	Ser	Asp	Ala	Ile	Met	Asn	Met	Gln	Asp	Asn	Ser					
				320					325					330					
Val	Gln	Val	Ser	Gln	Lys	Val	Phe	Gln	Gly	Cys	Gly	Pro	Pro	Lys					
				335					340					345					
Pro	Leu	Pro	Ala	Gly	Arg	Ile	Ser	Arg	Ser	Ile	Ser	Glu	Ser	Ala					
				350					355					360					
Phe	Ser	Ala	Arg	Phe	Arg	Pro	His	His	Pro	Glu	Glu	Arg	Pro	Thr					
				365					370					375					
Thr	Ala	Ala	Gly	Thr	Ser	Leu	Asp	Arg	Leu	Val	Thr	Asp	Val	Lys					
				380					385					390					
Glu	Lys	Leu	Lys	Gln	Ala	Lys	Lys	Phe	Trp	Ser	Ser	Leu	Pro	Ser					
				395					400					405					
Asn	Val	Cys	Asn	Asp	Glu	Arg	Met	Ala	Ala	Gly	Asn	Gly	Asn	Glu					
				410					415					420					
Asp	Asp	Cys	Trp	Asn	Gly	Lys	Gly	Lys	Ser	Arg	Tyr	Leu	Phe	Ala					
				425					430					435					
Val	Thr	Gly	Asn	Gly	Leu	Ala	Asn	Gln	Gly	Asn	Asn	Pro	Glu	Val					
				440					445					450					
Gln	Val	Asp	Thr	Ser	Lys	Pro	Asp	Ile	Leu	Ile	Leu	Arg	Gln	Ile					
				455					460					465					

Met	Ala	Leu	Arg	Val	Met	Thr	Ser	Lys	Met	Lys	Asn	Ala	Tyr	Asn
				470					475					480
Gly	Asn	Asp	Val	Asp	Phe	Phe	Asp	Ile	Ser	Asp	Glu	Ser	Ser	Gly
				485					490					495
Glu	Gly	Ser	Gly	Ser	Gly	Cys	Glu	Tyr	Gln	Gln	Cys	Pro	Ser	Glu
				500					505					510
Phe	Asp	Tyr	Asn	Ala	Thr	Asp	His	Ala	Gly	Lys	Ser	Ala	Asn	Glu
				515					520					525
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
				530					535					540
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
				545					550					555

Arg

<210> 25
 <211> 870
 <212> DNA
 <213> Homo Sapien

<400> 25
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 ggaaccttcc attatattct tcaagcaact tacagctgca ccgacagttg 150
 cgatgaaagt tctaattctt tccctcctcc tgttgctgcc actaatgctg 200
 atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250
 ggaccgaggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300
 gtgagtgcaa agattgggtc ctgagagccc cgagaagaaa attcatgaca 350
 gtgtctgggc tgccaaagaa gcagtgtccc tgtgatcatt tcaagggcaa 400
 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450
 ccagagcctg ccagcaattt ctcaaacaat gtcagctaag aagctttgct 500
 ctgcctttgt aggagctctg agcgcccact cttccaatta aacatttctc 550
 gccaagaaga cagtgagcac acctaccaga cactcttctt ctcccacctc 600
 acttctccac tgtaccaccc cctaaatcat tccagtgtc tcaaaaagca 650
 tgtttttcaa gatcattttg tttgttgctc tctctagtgt cttcttctct 700
 cgtcagtctt agcctgtgcc ctccccttac ccaggcttag gcttaattac 750
 ctgaaagatt ccaggaaact gtagcttcct agctagtgtc atttaacctt 800

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tcaaaaaaaaa aaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26

Met	Lys	Val	Leu	Ile	Ser	Ser	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Met
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Leu	Met	Ser	Met	Val	Ser	Ser	Ser	Leu	Asn	Pro	Gly	Val	Ala	Arg
				20					25					30

Gly	His	Arg	Asp	Arg	Gly	Gln	Ala	Ser	Arg	Arg	Trp	Leu	Gln	Glu
				35					40					45

Gly	Gly	Gln	Glu	Cys	Glu	Cys	Lys	Asp	Trp	Phe	Leu	Arg	Ala	Pro
				50					55					60

Arg	Arg	Lys	Phe	Met	Thr	Val	Ser	Gly	Leu	Pro	Lys	Lys	Gln	Cys
				65					70					75

Pro	Cys	Asp	His	Phe	Lys	Gly	Asn	Val	Lys	Lys	Thr	Arg	His	Gln
				80					85					90

Arg	His	His	Arg	Lys	Pro	Asn	Lys	His	Ser	Arg	Ala	Cys	Gln	Gln
				95					100					105

Phe	Leu	Lys	Gln	Cys	Gln	Leu	Arg	Ser	Phe	Ala	Leu	Pro	Leu
				110					115				

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

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ggaagcacag ctcagagctg gtctgccatg gacatcctgg tcccactcct 100

gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150

tgggctgctg gcagccccctg tgcaaaagct acttccccta cctgatggcc 200

gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250

cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300

tggagctggg ctgcggaacc ggagccaact ttcagttcta cccaccgggc 350

tgcagggtea cctgcctaga cccaaatccc cactttgaga agttcctgac 400

aaagagcatg gctgagaaca ggcacctcca atatgagcgg tttgtggtgg 450

ctctctggaga ggacatgaga cagctggctg atggctccat ggatgtggtg 500
 gtctgcactc tgggtgctgtg ctctgtgcag agcccaagga aggtcctgca 550
 ggaggtccgg agagtactga gaccgggagg tgtgctcttt ttctgggagc 600
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 ctggaaggat cttgagaacg cccagttctc cgaaatccaa atggaacgac 750
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 cagcctccaa ttagaacaag ccaccacca gcctatctat cttccactga 900
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 ctctctcccc aacctctgcc agggcaatct ctaacttcaa tcccgccttc 1000
 gacagtgaaa aagctctact tctacgtga cccagggagg aaacactagg 1050
 accctgttgt atcctcaact gcaagtttct ggactagtct cccaacgttt 1100
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 ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
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<210> 28

<211> 277

<212> PRT

<213> Homo Sapien

<400> 28

Met	Asp	Ile	Leu	Val	Pro	Leu	Leu	Gln	Leu	Leu	Val	Leu	Leu	Leu
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Thr	Leu	Pro	Leu	His	Leu	Met	Ala	Leu	Leu	Gly	Cys	Trp	Gln	Pro
				20						25				30

Leu	Cys	Lys	Ser	Tyr	Phe	Pro	Tyr	Leu	Met	Ala	Val	Leu	Thr	Pro
				35						40				45

Lys	Ser	Asn	Arg	Lys	Met	Glu	Ser	Lys	Lys	Arg	Glu	Leu	Phe	Ser
				50						55				60

Gln	Ile	Lys	Gly	Leu	Thr	Gly	Ala	Ser	Gly	Lys	Val	Ala	Leu	Leu
				65						70				75

Glu	Leu	Gly	Cys	Gly	Thr	Gly	Ala	Asn	Phe	Gln	Phe	Tyr	Pro	Pro	
				80					85					90	
Gly	Cys	Arg	Val	Thr	Cys	Leu	Asp	Pro	Asn	Pro	His	Phe	Glu	Lys	
				95					100					105	
Phe	Leu	Thr	Lys	Ser	Met	Ala	Glu	Asn	Arg	His	Leu	Gln	Tyr	Glu	
				110					115					120	
Arg	Phe	Val	Val	Ala	Pro	Gly	Glu	Asp	Met	Arg	Gln	Leu	Ala	Asp	
				125					130					135	
Gly	Ser	Met	Asp	Val	Val	Val	Cys	Thr	Leu	Val	Leu	Cys	Ser	Val	
				140					145					150	
Gln	Ser	Pro	Arg	Lys	Val	Leu	Gln	Glu	Val	Arg	Arg	Val	Leu	Arg	
				155					160					165	
Pro	Gly	Gly	Val	Leu	Phe	Phe	Trp	Glu	His	Val	Ala	Glu	Pro	Tyr	
				170					175					180	
Gly	Ser	Trp	Ala	Phe	Met	Trp	Gln	Gln	Val	Phe	Glu	Pro	Thr	Trp	
				185					190					195	
Lys	His	Ile	Gly	Asp	Gly	Cys	Cys	Leu	Thr	Arg	Glu	Thr	Trp	Lys	
				200					205					210	
Asp	Leu	Glu	Asn	Ala	Gln	Phe	Ser	Glu	Ile	Gln	Met	Glu	Arg	Gln	
				215					220					225	
Pro	Pro	Pro	Leu	Lys	Trp	Leu	Pro	Val	Gly	Pro	His	Ile	Met	Gly	
				230					235					240	
Lys	Ala	Val	Lys	Gln	Ser	Phe	Pro	Ser	Ser	Lys	Ala	Leu	Ile	Cys	
				245					250					255	
Ser	Phe	Pro	Ser	Leu	Gln	Leu	Glu	Gln	Ala	Thr	His	Gln	Pro	Ile	
				260					265					270	
Tyr	Leu	Pro	Leu	Arg	Gly	Thr									
				275											

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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 gactggctgg tgcccagaaa gtctcttctg ccaactgacgc ccccatcagg 150
 gattgggect tctttccccc ttcctttctg tgtctcctgc ctcatcgcc 200
 tgccatgacc tgcagccaag ccagccccg tggggaaggg gagaaagtgg 250

gggatggcta agaaagctgg gagatagggg acagaagagg gtagtgggtg 300
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 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400
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 taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 30
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 Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
 20 25 30
 Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
 35 40 45
 Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
 50 55 60
 Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
 65 70

<210> 31
 <211> 1660
 <212> DNA
 <213> Homo Sapien

<400> 31
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 atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200
 gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250
 gatgtttacc ttcagattca tcaccaccct tctgggttcac attttcattt 300
 cattgggttat tttgggattg ttgtttgtct gcggtgtttt atggtggctg 350
 tattatgact ataccaacga cctcagcata gaattggaca cagaaagga 400
 aaatatgaag tgcgtgctgg gggttgctat cgtatccaca ggcattcacg 450
 cagtgtgct cgtcttgatt tttgtttctca gaaagagaat aaaattgaca 500
 gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttctt 550

gctgttccag ccactgtgga catttgccat cctcattttc ttctgggtcc 600
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atggaaggcg gccaaagtga atataagccc ctttcgggca ttcggtacat 700
gtggtcgtac catttaattg gcctcatctg gactagtga ttcattcctg 750
cgtgccagca aatgactata gctggggcag tggttacttg ttatttcaac 800
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tctcttcttc taccatcaag gaaccgttgt gaaagggta tttttaatct 900
ctgtgggtgag gattccgaga atcattgtca tgtacatgca aaacgcactg 950
aaagaacagc agcatgggtgc attgtccagg tacctgttcc gatgctgcta 1000
ctgctgtttc tgggtgtcttg acaaatacct gctccatctc aaccagaatg 1050
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gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150
ctgcttttga gacttcataa tttttctagg aaagggtgta gtgggtgtgt 1200
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<210> 32
<211> 445
<212> PRT
<213> Homo Sapien

<400> 32
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20 25 30

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 35 40 45
 Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
 50 55 60
 Asp Leu Ser Ile Glu Leu Asp Thr Glu Arg Glu Asn Met Lys Cys
 65 70 75
 Val Leu Gly Phe Ala Ile Val Ser Thr Gly Ile Thr Ala Val Leu
 80 85 90
 Leu Val Leu Ile Phe Val Leu Arg Lys Arg Ile Lys Leu Thr Val
 95 100 105
 Glu Leu Phe Gln Ile Thr Asn Lys Ala Ile Ser Ser Ala Pro Phe
 110 115 120
 Leu Leu Phe Gln Pro Leu Trp Thr Phe Ala Ile Leu Ile Phe Phe
 125 130 135
 Trp Val Leu Trp Val Ala Val Leu Leu Ser Leu Gly Thr Ala Gly
 140 145 150
 Ala Ala Gln Val Met Glu Gly Gly Gln Val Glu Tyr Lys Pro Leu
 155 160 165
 Ser Gly Ile Arg Tyr Met Trp Ser Tyr His Leu Ile Gly Leu Ile
 170 175 180
 Trp Thr Ser Glu Phe Ile Leu Ala Cys Gln Gln Met Thr Ile Ala
 185 190 195
 Gly Ala Val Val Thr Cys Tyr Phe Asn Arg Ser Lys Asn Asp Pro
 200 205 210
 Pro Asp His Pro Ile Leu Ser Ser Leu Ser Ile Leu Phe Phe Tyr
 215 220 225
 His Gln Gly Thr Val Val Lys Gly Ser Phe Leu Ile Ser Val Val
 230 235 240
 Arg Ile Pro Arg Ile Ile Val Met Tyr Met Gln Asn Ala Leu Lys
 245 250 255
 Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu Phe Arg Cys Cys
 260 265 270
 Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu His Leu Asn
 275 280 285
 Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp Phe Cys
 290 295 300
 Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser Ser
 305 310 315
 His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu

320										325				330			
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met			
				335					340					345			
Ala	Phe	Asn	Tyr	Asn	Arg	Ala	Phe	Gln	Val	Trp	Ala	Val	Pro	Leu			
				350					355					360			
Leu	Leu	Val	Ala	Phe	Phe	Ala	Tyr	Leu	Val	Ala	His	Ser	Phe	Leu			
				365					370					375			
Ser	Val	Phe	Glu	Thr	Val	Leu	Asp	Ala	Leu	Phe	Leu	Cys	Phe	Ala			
				380					385					390			
Val	Asp	Leu	Glu	Thr	Asn	Asp	Gly	Ser	Ser	Glu	Lys	Pro	Tyr	Phe			
				395					400					405			
Met	Asp	Gln	Glu	Phe	Leu	Ser	Phe	Val	Lys	Arg	Ser	Asn	Lys	Leu			
				410					415					420			
Asn	Asn	Ala	Arg	Ala	Gln	Gln	Asp	Lys	His	Ser	Leu	Arg	Asn	Glu			
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<210> 33
 <211> 2773
 <212> DNA
 <213> Homo Sapien

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 attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200
 ttctcactat gaaggcatct gttattgaaa tgttccttgt tttgctggtg 250
 actggagtac attcaaaca aaaaacggca aagaagatta aaaggcccaa 300
 gttcactgtg cctcagatca actgcatgtg caaagccgga aagatcatcg 350
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 caatcggttat ccctaccacg atggagagaa tcctttatcg tcttagaaaag 600
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cgaaaagtcc agctgcccac gcaggtgaga ccacaaaagc ctatcagagg 700
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 aggagccagg agatggatct ctgggccact gccacctaca caagcagcca 900
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 gtaggtcggg ccattctcctt tgtgaccaag aacttctttt ccaaagccaa 1350
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aaaaaaaaaa aaaaaaaaaa aag 2773

<210> 34
<211> 678
<212> PRT
<213> Homo Sapien

<400> 34
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Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
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Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
35 40 45
Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
50 55 60
Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
65 70 75
Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
80 85 90
His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
95 100 105
Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
110 115 120

Val	Gln	Ser	Leu	Ser	Leu	Pro	Arg	Trp	Arg	Glu	Ser	Phe	Ile	Val	
					125					130				135	
Leu	Glu	Ser	Lys	Pro	Lys	Lys	Gly	Val	Thr	Tyr	Pro	Ser	Ala	Leu	
					140					145				150	
Thr	Tyr	Ser	Ser	Ser	Lys	Ser	Pro	Ala	Ala	Gln	Ala	Gly	Glu	Thr	
					155					160				165	
Thr	Lys	Ala	Tyr	Gln	Arg	Pro	Pro	Ile	Pro	Gly	Thr	Thr	Ala	Gln	
					170					175				180	
Pro	Val	Thr	Leu	Met	Gln	Leu	Leu	Ala	Val	Thr	Val	Ala	Val	Ala	
					185					190				195	
Thr	Pro	Thr	Thr	Leu	Pro	Arg	Pro	Ser	Pro	Ser	Ala	Ala	Ser	Thr	
					200					205				210	
Thr	Ser	Ile	Pro	Arg	Pro	Gln	Ser	Val	Gly	His	Arg	Ser	Gln	Glu	
					215					220				225	
Met	Asp	Leu	Trp	Ser	Thr	Ala	Thr	Tyr	Thr	Ser	Ser	Gln	Asn	Arg	
					230					235				240	
Pro	Arg	Ala	Asp	Pro	Gly	Ile	Gln	Arg	Gln	Asp	Pro	Ser	Gly	Ala	
					245					250				255	
Ala	Phe	Gln	Lys	Pro	Val	Gly	Ala	Asp	Val	Ser	Leu	Gly	Leu	Val	
					260					265				270	
Pro	Lys	Glu	Glu	Leu	Ser	Thr	Gln	Ser	Leu	Glu	Pro	Val	Ser	Leu	
					275					280				285	
Gly	Asp	Pro	Asn	Cys	Lys	Ile	Asp	Leu	Ser	Phe	Leu	Ile	Asp	Gly	
					290					295				300	
Ser	Thr	Ser	Ile	Gly	Lys	Arg	Arg	Phe	Arg	Ile	Gln	Lys	Gln	Leu	
					305					310				315	
Leu	Ala	Asp	Val	Ala	Gln	Ala	Leu	Asp	Ile	Gly	Pro	Ala	Gly	Pro	
					320					325				330	
Leu	Met	Gly	Val	Val	Gln	Tyr	Gly	Asp	Asn	Pro	Ala	Thr	His	Phe	
					335					340				345	
Asn	Leu	Lys	Thr	His	Thr	Asn	Ser	Arg	Asp	Leu	Lys	Thr	Ala	Ile	
					350					355				360	
Glu	Lys	Ile	Thr	Gln	Arg	Gly	Gly	Leu	Ser	Asn	Val	Gly	Arg	Ala	
					365					370				375	
Ile	Ser	Phe	Val	Thr	Lys	Asn	Phe	Phe	Ser	Lys	Ala	Asn	Gly	Asn	
					380					385				390	
Arg	Ser	Gly	Ala	Pro	Asn	Val	Val	Val	Val	Met	Val	Asp	Gly	Trp	
					395					400				405	
Pro	Thr	Asp	Lys	Val	Glu	Glu	Ala	Ser	Arg	Leu	Ala	Arg	Glu	Ser	

410	415	420
Gly Ile Asn Ile Phe Phe Ile Thr Ile	Glu Gly Ala Ala Glu Asn	435
425	430	
Glu Lys Gln Tyr Val Val Glu Pro Asn	Phe Ala Asn Lys Ala Val	450
440	445	
Cys Arg Thr Asn Gly Phe Tyr Ser Leu	His Val Gln Ser Trp Phe	465
455	460	
Gly Leu His Lys Thr Leu Gln Pro Leu	Val Lys Arg Val Cys Asp	480
470	475	
Thr Asp Arg Leu Ala Cys Ser Lys Thr	Cys Leu Asn Ser Ala Asp	495
485	490	
Ile Gly Phe Val Ile Asp Gly Ser Ser	Ser Val Gly Thr Gly Asn	510
500	505	
Phe Arg Thr Val Leu Gln Phe Val Thr	Asn Leu Thr Lys Glu Phe	525
515	520	
Glu Ile Ser Asp Thr Asp Thr Arg Ile	Gly Ala Val Gln Tyr Thr	540
530	535	
Tyr Glu Gln Arg Leu Glu Phe Gly Phe	Asp Lys Tyr Ser Ser Lys	555
545	550	
Pro Asp Ile Leu Asn Ala Ile Lys Arg	Val Gly Tyr Trp Ser Gly	570
560	565	
Gly Thr Ser Thr Gly Ala Ala Ile Asn	Phe Ala Leu Glu Gln Leu	585
575	580	
Phe Lys Lys Ser Lys Pro Asn Lys Arg	Lys Leu Met Ile Leu Ile	600
590	595	
Thr Asp Gly Arg Ser Tyr Asp Asp Val	Arg Ile Pro Ala Met Ala	615
605	610	
Ala His Leu Lys Gly Val Ile Thr Tyr	Ala Ile Gly Val Ala Trp	630
620	625	
Ala Ala Gln Glu Glu Leu Glu Val Ile	Ala Thr His Pro Ala Arg	645
635	640	
Asp His Ser Phe Phe Val Asp Glu Phe	Asp Asn Leu His Gln Tyr	660
650	655	
Val Pro Arg Ile Ile Gln Asn Ile Cys	Thr Glu Phe Asn Ser Gln	675
665	670	

Pro Arg Asn

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 <211> 2095

<212> DNA
<213> Homo Sapien

<400> 35
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gtagttcaca acagatctga gtgttttaat taagcatgga atacagaaaa 150
caacaaaaaa cttaagcttt aatttcatct ggaattccac agttttctta 200
gctccctgga cccggttgac ctgttggtc ttcccgtgg ctgctctatc 250
acgtgggtgct ctccgactac tcaccccgag tgtaaagaac cttcggctcg 300
cgtgcttctg agctgctgtg gatggcctcg gctctctgga ctgtccttcc 350
gagtaggatg tcaactgagat ccctcaaag gagcctcctg ctgctgtcac 400
tcctgagttt ctttgtgatg tggtaacctca gccttcccca ctacaatgtg 450
atagaacgcg tgaactggat gtacttctat gagtatgagc cgatttacag 500
acaagacttt cacttcacac ttcgagagca ttcaaactgc tctcatcaaa 550
atccatttct ggtcattctg gtgacctccc acccttcaga tgtgaaagcc 600
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tgaggttctt acatttttct tattaggcca agaggctgaa aaggaagaca 700
aaatgttggc attgtcctta gaggatgaac accttcttta tggtgacata 750
atccgacaag attttttaga cacatataat aacctgacct tgaaaaccat 800
tatggcattc aggtgggtaa ctgagttttg cccaatgcc aagtacgtaa 850
tgaagacaga cactgatgtt ttcacataa ctggcaattt agtgaagtat 900
cttttaaacc taaaccactc agagaagttt ttcacagggt atcctctaata 950
tgataattat tcctatagag gattttacca aaaaacccat atttcttacc 1000
aggagtatcc tttcaagggt ttccctccat actgcagtgg gttgggttat 1050
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taaaagtga cttcatatt ccagaagaca caaatctttt ctttctatat 1200
agaatccatt tggatgtctg tcaactgaga cgtgtgattg cagcccatgg 1250
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ccacatgcca ttattaactt cacattctac aaaaagccta gaaggacagg 1350

ataccttggtg gaaagtgtta aataaagtag gtactgtgga aaattcatgg 1400
 ggaggtcagt gtgctggctt acactgaact gaaactcatg aaaaaccag 1450
 actggagact ggaggggttac acttgtgatt tattagtcag gcccttcaaa 1500
 gatgatatgt ggaggaatta aatataaagg aattggaggt ttttgctaaa 1550
 gaaattaata ggaccaaaca atttggacat gtcattctgt agactagaat 1600
 ttcttaaaag ggtgttactg agttataagc tcactaggct gtaaaaacaa 1650
 aacaatgtag agttttatatt attgaacaat gtagtcactt gaaggttttg 1700
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 gtcatttata aagtacttca agatgttgca gtatttcaca gttattatta 1850
 tttaaaatta cttcaacttt gtgtttttta atgttttgac gatttcaata 1900
 caagataaaa aggatagtga atcattcttt acatgcaaac attttccagt 1950
 tacttaactg atcagtttat tattgataca tcactccatt aatgtaaagt 2000
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 tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 36
 <211> 331
 <212> PRT
 <213> Homo Sapien

<400> 36
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 Arg Ser Leu Lys Trp Ser Leu Leu Leu Leu Ser Leu Leu Ser Phe 30
 20 25
 Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu 45
 35 40
 Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg 60
 50 55
 Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His 75
 65 70
 Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp 90
 80 85
 Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys 105
 95 100
 Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln

110										115					120				
Glu	Ala	Glu	Lys	Glu	Asp	Lys	Met	Leu	Ala	Leu	Ser	Leu	Glu	Asp					
				125					130					135					
Glu	His	Leu	Leu	Tyr	Gly	Asp	Ile	Ile	Arg	Gln	Asp	Phe	Leu	Asp					
				140					145					150					
Thr	Tyr	Asn	Asn	Leu	Thr	Leu	Lys	Thr	Ile	Met	Ala	Phe	Arg	Trp					
				155					160					165					
Val	Thr	Glu	Phe	Cys	Pro	Asn	Ala	Lys	Tyr	Val	Met	Lys	Thr	Asp					
				170					175					180					
Thr	Asp	Val	Phe	Ile	Asn	Thr	Gly	Asn	Leu	Val	Lys	Tyr	Leu	Leu					
				185					190					195					
Asn	Leu	Asn	His	Ser	Glu	Lys	Phe	Phe	Thr	Gly	Tyr	Pro	Leu	Ile					
				200					205					210					
Asp	Asn	Tyr	Ser	Tyr	Arg	Gly	Phe	Tyr	Gln	Lys	Thr	His	Ile	Ser					
				215					220					225					
Tyr	Gln	Glu	Tyr	Pro	Phe	Lys	Val	Phe	Pro	Pro	Tyr	Cys	Ser	Gly					
				230					235					240					
Leu	Gly	Tyr	Ile	Met	Ser	Arg	Asp	Leu	Val	Pro	Arg	Ile	Tyr	Glu					
				245					250					255					
Met	Met	Gly	His	Val	Lys	Pro	Ile	Lys	Phe	Glu	Asp	Val	Tyr	Val					
				260					265					270					
Gly	Ile	Cys	Leu	Asn	Leu	Leu	Lys	Val	Asn	Ile	His	Ile	Pro	Glu					
				275					280					285					
Asp	Thr	Asn	Leu	Phe	Phe	Leu	Tyr	Arg	Ile	His	Leu	Asp	Val	Cys					
				290					295					300					
Gln	Leu	Arg	Arg	Val	Ile	Ala	Ala	His	Gly	Phe	Ser	Ser	Lys	Glu					
				305					310					315					
Ile	Ile	Thr	Phe	Trp	Gln	Val	Met	Leu	Arg	Asn	Thr	Thr	Cys	His					
				320					325					330					

Tyr

<210> 37
 <211> 2846
 <212> DNA
 <213> Homo Sapien

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 tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150

tcgggagtgc tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
 gggaaagtcgt gggttataacc atcccttgct gcaggaatga ggagaatgag 250
 tgtgactcct gcctgatcca cccaggttgt accatctttg aaaactgcaa 300
 gagctgccga aatggctcat gggggggtac cttggatgac ttctatgtga 350
 aggggttcta ctgtgcagag tgccgagcag gctggtagcg aggagactgc 400
 atgcgatgtg gccaggttct gcgagcccca aagggtcaga ttttgttgga 450
 aagctatccc ctaaagtctc actgtgaatg gaccattcat gctaaacctg 500
 ggtttgtcat ccaactaaga tttgtcatgt tgagtctgga gtttgactac 550
 atgtgccagt atgactatgt tgaggttcgt gatggagaca accgcgatgg 600
 ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatccaga 650
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 tttgacgggt tccatgccat ttatgaggag atcacagcat gtcctcatc 750
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 gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900
 aataacaggg ggcctgggc ttatcaacgg acgcatgct aaaattggca 950
 ccgtggtgtc tttcttttgt aacaactcct atgttcttag tggcaatgag 1000
 aaaagaactt gccagcagaa tggagagtgg tcagggaaac agcccatctg 1050
 cataaaagcc tgccgagaac caaagatttc agacctggtg agaaggagag 1100
 ttcttccgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150
 tcagcggcct tcagcaagca gaaactgcag agtgcccta ccaagaagcc 1200
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 aggaggacat gtctgaggac tgggaagtgg agtgggcggg caccatcctg 1350
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 gggtgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
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 tggggaaggt caccatgatc aagacagcag acctgaaagt tgttttgggg 1600

aaattctacc gggatgatga cgggatgag aagaccatcc agagcctaca 1650
 gattttctget atcattctgc atcccaacta tgaccccatc ctgcttgatg 1700
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2846

<210> 38

<211> 720

<212> PRT

<213> Homo Sapien

<400> 38

Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln

1

5

10

15

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 20 25 30
 Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
 35 40 45
 Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
 50 55 60
 Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
 65 70 75
 Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
 80 85 90
 Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
 95 100 105
 Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp
 110 115 120
 Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro
 125 130 135
 Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys
 140 145 150
 Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg
 155 160 165
 Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp
 170 175 180
 Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile
 185 190 195
 Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln Ser Ile
 200 205 210
 Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys Asn
 215 220 225
 Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser
 230 235 240
 Ser Ser Pro Cys Phe His Asp Gly Thr Cys Val Leu Asp Lys Ala
 245 250 255
 Gly Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg
 260 265 270
 Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser Asp Pro Gly Gly
 275 280 285
 Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile
 290 295 300
 Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys

	305	310	315
Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln	320	325	330
Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala	335	340	345
Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu	350	355	360
Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr	365	370	375
Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys	380	385	390
Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His	395	400	405
Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg	410	415	420
Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp	425	430	435
Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu	440	445	450
Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln	455	460	465
Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu	470	475	480
His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn	485	490	495
Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly	500	505	510
Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly	515	520	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser	530	535	540
Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile	545	550	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala	560	565	570
Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg	575	580	585
Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly	590	595	600

Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	
				605					610					615	
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	
				620					625					630	
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	
				635					640					645	
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	
				650					655					660	
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	
				665					670					675	
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	
				680					685					690	
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	
				695					700					705	
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	
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<210> 39
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 39
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 ttgtgatcta ctgattgtgg gggcatggca aggtttgctt aaaggagctt 150
 ggctgggtttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctgggtc tgccttgggt 250
 cagtcctgct aactacattg acaatgtggg caacctgcac ttctgtatt 300
 cagaactctg taaaggtgcc tccactacg gcctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
 ggctccctcc ccagaggttt ctgcagctgc caccatctcc ttaatgacag 450
 acgagcctgg cctagacaac cctgcctacg tgtcctcggc agaggacggg 500
 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550
 acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
 atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
 aacctgccc accagggcag ggaaaattct gaaaacacca ctgccctga 700

agtctttcca aggttgtacc acctgattcc agatggtgaa attaccagca 750
 tcaagatcaa tcgagtagat cccagtgaag gcctctctat taggctggtg 800
 ggaggtagcg aaaccccact ggtccatatac attatccaac acatttatcg 850
 tgatgggggtg atcgccagag acggccggct actgccagga gacatcattc 900
 taaaggtcaa cgggatggac atcagcaatg tccctcacia ctacgctgtg 950
 cgtctcctgc ggcagccctg ccaggtgctg tggctgactg tgatgcgtga 1000
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 cccgagatga cagctttcat gtgatttca acaaaagtag ccccgaggag 1100
 cagcttgga taaaactggg gcgcaagggt gatgagcctg gggttttcat 1150
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 agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
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 cgtcgtgtcc cgccagggtc ggcagcggag ccctgacatc tttcaggaag 1350
 ccggctggaa cagcaatggc agctgggtccc cagggccagg ggagaggagc 1400
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 aaatatccaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500
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 gtcaatggtg gaagtacatc aggaatgata catgcttgct tggcaagact 2050
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aaataggcta agaagttgaa acactatatt tatcttgtca gtttttatat 2200
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 tgaaagccag ttacacctca gaaaatatga ttccaaaaaa attaaaacta 2300
 ctagtttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350
 atattttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
 tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450
 ctgaagtctg ccaagggtag attatggcca tttttaattt acagctaaaa 2500
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 aaatattttt cagaagttaa a 2571

<210> 40
 <211> 632
 <212> PRT
 <213> Homo Sapien

<400> 40
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 Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
 35 40 45
 Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
 50 55 60
 Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
 65 70 75
 Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
 80 85 90
 Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
 95 100 105
 Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
 110 115 120
 Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu
 125 130 135
 Arg Arg Thr Lys Ser Gly Ser Ala Val Ala Asn His Ala Asp Gln
 140 145 150
 Gly Arg Glu Asn Ser Glu Asn Thr Thr Ala Pro Glu Val Phe Pro
 155 160 165
 Arg Leu Tyr His Leu Ile Pro Asp Gly Glu Ile Thr Ser Ile Lys

	170	175	180
Ile Asn Arg Val	Asp Pro Ser Glu Ser	Leu Ser Ile Arg Leu Val	
	185	190	195
Gly Gly Ser Glu Thr	Pro Leu Val His	Ile Ile Ile Gln His Ile	
	200	205	210
Tyr Arg Asp Gly Val	Ile Ala Arg Asp	Gly Arg Leu Leu Pro Gly	
	215	220	225
Asp Ile Ile Leu Lys	Val Asn Gly Met	Asp Ile Ser Asn Val Pro	
	230	235	240
His Asn Tyr Ala Val	Arg Leu Leu Arg	Gln Pro Cys Gln Val Leu	
	245	250	255
Trp Leu Thr Val Met	Arg Glu Gln Lys	Phe Arg Ser Arg Asn Asn	
	260	265	270
Gly Gln Ala Pro Asp	Ala Tyr Arg Pro	Arg Asp Asp Ser Phe His	
	275	280	285
Val Ile Leu Asn Lys	Ser Ser Pro Glu	Glu Gln Leu Gly Ile Lys	
	290	295	300
Leu Val Arg Lys Val	Asp Glu Pro Gly	Val Phe Ile Phe Asn Val	
	305	310	315
Leu Asp Gly Gly Val	Ala Tyr Arg His	Gly Gln Leu Glu Glu Asn	
	320	325	330
Asp Arg Val Leu Ala	Ile Asn Gly His	Asp Leu Arg Tyr Gly Ser	
	335	340	345
Pro Glu Ser Ala Ala	His Leu Ile Gln	Ala Ser Glu Arg Arg Val	
	350	355	360
His Leu Val Val Ser	Arg Gln Val Arg	Gln Arg Ser Pro Asp Ile	
	365	370	375
Phe Gln Glu Ala Gly	Trp Asn Ser Asn	Gly Ser Trp Ser Pro Gly	
	380	385	390
Pro Gly Glu Arg Ser	Asn Thr Pro Lys	Pro Leu His Pro Thr Ile	
	395	400	405
Thr Cys His Glu Lys	Val Val Asn Ile	Gln Lys Asp Pro Gly Glu	
	410	415	420
Ser Leu Gly Met Thr	Val Ala Gly Gly	Ala Ser His Arg Glu Trp	
	425	430	435
Asp Leu Pro Ile Tyr	Val Ile Ser Val	Glu Pro Gly Gly Val Ile	
	440	445	450
Ser Arg Asp Gly Arg	Ile Lys Thr Gly	Asp Ile Leu Leu Asn Val	
	455	460	465

Asp	Gly	Val	Glu	Leu	Thr	Glu	Val	Ser	Arg	Ser	Glu	Ala	Val	Ala	
				470					475					480	
Leu	Leu	Lys	Arg	Thr	Ser	Ser	Ser	Ile	Val	Leu	Lys	Ala	Leu	Glu	
				485					490					495	
Val	Lys	Glu	Tyr	Glu	Pro	Gln	Glu	Asp	Cys	Ser	Ser	Pro	Ala	Ala	
				500					505					510	
Leu	Asp	Ser	Asn	His	Asn	Met	Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro	
				515					520					525	
Ser	Trp	Val	Met	Trp	Leu	Glu	Leu	Pro	Arg	Cys	Leu	Tyr	Asn	Cys	
				530					535					540	
Lys	Asp	Ile	Val	Leu	Arg	Arg	Asn	Thr	Ala	Gly	Ser	Leu	Gly	Phe	
				545					550					555	
Cys	Ile	Val	Gly	Gly	Tyr	Glu	Glu	Tyr	Asn	Gly	Asn	Lys	Pro	Phe	
				560					565					570	
Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala	Tyr	Asn	Asp	Gly	
				575					580					585	
Arg	Ile	Arg	Cys	Gly	Asp	Ile	Leu	Leu	Ala	Val	Asn	Gly	Arg	Ser	
				590					595					600	
Thr	Ser	Gly	Met	Ile	His	Ala	Cys	Leu	Ala	Arg	Leu	Leu	Lys	Glu	
				605					610					615	
Leu	Lys	Gly	Arg	Ile	Thr	Leu	Thr	Ile	Val	Ser	Trp	Pro	Gly	Thr	
				620					625					630	

Phe Leu

<210> 41
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 41
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 caaattccga ttactgttgc tgttgacttt gtgctgaca gtgggttggt 200
 gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
 aaggagtcca tggctaattt ccataagacc ctcattttgg ggaagggaaa 300
 aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400

gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
ccggtatcgc cctcaggaat gtaaagcttt acagaggggt gccatcctcg 500
ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
tccaagcat ctggtggttg gcaggaacag cactgggtac aggttacgtt 800
acagtggata ttttgggggt gttactgccc taagcagaga gcagtttttc 850
aaggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
tgacctcaga ctcagggttg agctccaaag aatgaaaatt tcccgcccc 950
tgctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgttg 1100
aacacaatcc tttatatatc aacatcacag tggatttctg gtttgggtgca 1150
tgacctgga tcttttggtg atgtttggaa gaactgattc tttgtttgca 1200
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acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
ctcctggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
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ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
tggttgaagg agatttatct aaatttgaag taatatatta tgggataaaa 1500
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cgtccaaggt agaaaggtag gaagatacaa tactgttatt catttatcct 1600
gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
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cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850

tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatattaac taataataaaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 42
 Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu
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 Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr
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 Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
 35 40 45
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
 50 55 60
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
 65 70 75
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
 80 85 90
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
 95 100 105
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
 110 115 120
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
 125 130 135
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
 140 145 150
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
 155 160 165
 Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu
 170 175 180
 Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val
 185 190 195
 Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu
 200 205 210
 His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg
 215 220 225
 Leu Arg Tyr Ser Gly Tyr Phe Gly Gly Val Thr Ala Leu Ser Arg

230										235					240				
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly					
				245					250					255					
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln					
				260					265					270					
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr					
				275					280					285					
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu					
				290					295					300					
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp					
				305					310					315					
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn					
				320					325					330					
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala						
				335					340										

<210> 43
 <211> 485
 <212> DNA
 <213> Homo Sapien

<400> 43
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 ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
 gcaaccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200
 agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250
 ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300
 acctgccctg ccccggtccc ctcccttcct tatttattcc tgctgcccc 350
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44
 <211> 84
 <212> PRT
 <213> Homo Sapien

<400> 44
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Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
 20 25 30
 Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
 35 40 45
 Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
 50 55 60
 Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
 65 70 75
 Ser Lys Cys Gly Met Cys Cys Lys Thr
 80

<210> 45
 <211> 1076
 <212> DNA
 <213> Homo Sapien

<400> 45
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 caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
 gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150
 tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
 tcaacacaac cctctttgtc accatacagc cagaaggggg cactatcata 250
 gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300
 ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350
 tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400
 ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
 gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500
 atggggaaga ggatgtgatt tatacctgga aggccttggg gcaagcagcc 550
 aatgagtccc ataatgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcatct gcgttgccag gaacctgtc agcagaaact 650
 tctcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700
 ccagattcct ccattggtcct cctgtgtctc ctgttggtgc cctcctgct 750
 cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
 aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
 cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
 tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950

ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaagget atttgccat gagaatgtta tctagacagc 1050
agtgcactcc cctaagtctc tgctca 1076

<210> 46
<211> 335
<212> PRT
<213> Homo Sapien

<400> 46
Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
1 5 10 15
Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45
Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60
Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75
Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90
Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105
Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120
Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135
Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150
Cys Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr Thr Trp Lys
155 160 165
Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn Gly Ser Ile Leu
170 175 180
Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195
Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210
Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225
Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu

	230		235		240
Phe Val Leu Gly	Leu Phe Leu Trp Phe	Leu Lys Arg Glu Arg	Gln		
	245		250		255
Glu Glu Tyr Ile	Glu Glu Lys Lys Arg	Val Asp Ile Cys Arg	Glu		
	260		265		270
Thr Pro Asn Ile	Cys Pro His Ser Gly	Glu Asn Thr Glu Tyr	Asp		
	275		280		285
Thr Ile Pro His	Thr Asn Arg Thr Ile	Leu Lys Glu Asp Pro	Ala		
	290		295		300
Asn Thr Val Tyr	Ser Thr Val Glu Ile	Pro Lys Lys Met Glu	Asn		
	305		310		315
Pro His Ser Leu	Leu Thr Met Pro Asp	Thr Pro Arg Leu Phe	Ala		
	320		325		330
Tyr Glu Asn Val	Ile				
	335				

<210> 47
 <211> 766
 <212> DNA
 <213> Homo Sapien

<400> 47
 ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50
 gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100
 ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaatgt 150
 tctcaaaacc ccatctcttg ctttgagtgg tgggtcccag gaattatagg 200
 agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
 aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300
 agtgtgatca cagtcattgg tgcctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactgggtt 500
 caataaacc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccactttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcacggtt tccttggtg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750

gtttgaaaaa aaaaaa 766

<210> 48

<211> 229

<212> PRT

<213> Homo Sapien

<400> 48

Met	Thr	Cys	Cys	Glu	Gly	Trp	Thr	Ser	Cys	Asn	Gly	Phe	Ser	Leu
1				5					10					15

Leu	Val	Leu	Leu	Leu	Leu	Gly	Val	Val	Leu	Asn	Ala	Ile	Pro	Leu
				20					25					30

Ile	Val	Ser	Leu	Val	Glu	Glu	Asp	Gln	Phe	Ser	Gln	Asn	Pro	Ile
				35					40					45

Ser	Cys	Phe	Glu	Trp	Trp	Phe	Pro	Gly	Ile	Ile	Gly	Ala	Gly	Leu
				50					55					60

Met	Ala	Ile	Pro	Ala	Thr	Thr	Met	Ser	Leu	Thr	Ala	Arg	Lys	Arg
				65					70					75

Ala	Cys	Cys	Asn	Asn	Arg	Thr	Gly	Met	Phe	Leu	Ser	Ser	Phe	Phe
				80					85					90

Ser	Val	Ile	Thr	Val	Ile	Gly	Ala	Leu	Tyr	Cys	Met	Leu	Ile	Ser
				95					100					105

Ile	Gln	Ala	Leu	Leu	Lys	Gly	Pro	Leu	Met	Cys	Asn	Ser	Pro	Ser
				110					115					120

Asn	Ser	Asn	Ala	Asn	Cys	Glu	Phe	Ser	Leu	Lys	Asn	Ile	Ser	Asp
				125					130					135

Ile	His	Pro	Glu	Ser	Phe	Asn	Leu	Gln	Trp	Phe	Phe	Asn	Asp	Ser
				140					145					150

Cys	Ala	Pro	Pro	Thr	Gly	Phe	Asn	Lys	Pro	Thr	Ser	Asn	Asp	Thr
				155					160					165

Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu
				170					175					180

Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu
				185					190					195

Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile
				200					205					210

Val	Ile	Gly	Phe	Leu	Gly	Cys	Leu	Cys	Gly	Val	Ser	Lys	Arg	Arg
				215					220					225

Ser Gln Ile Val

<210> 49

<211> 636

<212> DNA
 <213> Homo Sapien

<400> 49
 atccgttctc tgcgctgcc a gctcaggtga gccctcgcca aggtgacctc 50
 gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaagca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tctccccctg ggaggcctta tctcaagga 550
 aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
 ttctttatga attaaactcg cccaccacc ccctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15
 Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
 20 25 30
 Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
 35 40 45
 Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
 50 55 60
 Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu
 65 70 75
 Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys
 80 85

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 51

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gacccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
caaagaggcc ggaggggcag ctggctctaa agtcagttag gcccttggcc 400
aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
ggcgagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
acggagcaga tgctgtccgc ggctcctggc aggggggtgcc tggccacagt 600
ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaagggtg 650
ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
tccacggata ccccggaac tcagcaggca gctttggaat gaatcctcag 750
ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcagggtga 900
ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
agtgggtgca gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
tgagtcctcc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
ggagcggcgg aggaaatgga cataaaccgg ggtgtgaaaa gccagggaat 1200
gaagcccgcg ggagcgggga atctgggatt cagggttca gaggacaggg 1250
agtttccagc aacatgaggg aaataagcaa agagggcaat cgcctccttg 1300
gaggctctgg agacaattat cgggggcaag ggtcgagctg gggcagtgga 1350
ggaggtgacg ctgttggtgg agtcaatact gtgaactctg agacgtctcc 1400
tgggatgttt aactttgaca ctttctggaa gaattttaaa tccaagctgg 1450

gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcatc 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
 ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
 aaataaacct tagctgcccc acaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 52
 Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
 1 5 10 15
 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90
 Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
 95 100 105
 Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
 110 115 120
 Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
 125 130 135
 Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile
 140 145 150
 Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro
 155 160 165
 Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser
 170 175 180
 Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln
 185 190 195
 Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly

200										205					210				
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln					
				215					220					225					
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly					
				230					235					240					
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser					
				245					250					255					
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly					
				260					265					270					
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser					
				275					280					285					
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser					
				290					295					300					
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly					
				305					310					315					
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His					
				320					325					330					
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly					
				335					340					345					
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn					
				350					355					360					
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser					
				365					370					375					
Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly					
				380					385					390					
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser					
				395					400					405					
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser					
				410					415					420					
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg					
				425					430					435					
Ser	Ser	Arg	Ile	Pro															
				440															

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
 ggagaagagg ttgtgtggga caagctgctc ccgacagaag gatgtcgctg 50

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actcctgctg ctggttggtg gtcctggct actcgccgc atcctggctt 150
ggacctatgc cttctataac aactgccgc ggctccagt tttcccacag 200
ccccaaaaac ggaactgggt ttgggggtcac ctgggcctga tcaactctac 250
agaggagggt ttgaaggact cgaccagat gtcggccacc tattcccagg 300
gctttacggt atggctgggt cccatcatcc cttcatcgt tttatgccac 350
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcaccaa 400
ggataatctc ttcacaggt tcctgaagcc ctggctggga gaagggatac 450
tgctgagtgg cggtgacaag tggagccgc accgtcggat gctgacgcc 500
gccttccatt tcaacatcct gaagtcctat ataacgatct tcaacaagag 550
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cagaaatgca tcttcagctt tgacagccat tgtcaggaga ggcccagtga 700
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agcatatcct ccagcacatg gactttctgt attacctctc ccatgacggg 800
cggcgcttcc acagggcctg ccgcctggtg catgacttca cagacgctgt 850
catccgggag cggcgctgca cctcccccac tcagggtatt gatgattttt 900
tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgcttctg 950
ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
agaggctgac accttcattg ttggaggcca tgacaccacg gccagtggcc 1050
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tgccgacagg aggtgcaaga gcttctgaag gaccgcgac ctaaagagat 1150
tgaatgggac gacctggccc agctgccctt cctgacctg tgcgtgaagg 1200
agagcctgag gttacatccc ccagctccct tcactctccg atgctgcacc 1250
caggacattg ttctcccaga tggccgagtc atccccaaag gcattacctg 1300
cctcatcgat attatagggg tccatcacia cccaactgtg tggccggatc 1350
ctgaggtcta cgacccttc cgctttgacc cagagaacag caaggggagg 1400
tcacctctgg cttttattcc tttctccgca gggcccagga actgcatcgg 1450
gcaggcgctt gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500

tgcacttccg gttcctgccg gaccacactg agccccgcag gaagctggaa 1550
 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
 tgtaggcttg cagtgacttt ctgacccatc cacctgtttt tttgcagatt 1650
 gtcatgaata aaacggtgct gtcaaa 1676

<210> 54
 <211> 524
 <212> PRT
 <213> Homo Sapien

<400> 54
 Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala
 1 5 10 15
 Met Ser Pro Trp Leu Leu Leu Leu Leu Val Val Gly Ser Trp Leu
 20 25 30
 Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys
 35 40 45
 Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
 50 55 60
 Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
 65 70 75
 Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
 80 85 90
 Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
 95 100 105
 Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys
 110 115 120
 Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly
 125 130 135
 Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met
 140 145 150
 Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr
 155 160 165
 Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His
 170 175 180
 Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile
 185 190 195
 Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe
 200 205 210
 Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile
 215 220 225

Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu	230	235	240
Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg	245	250	255
Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val	260	265	270
Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp	275	280	285
Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp	290	295	300
Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp	305	310	315
Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His	320	325	330
Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala	335	340	345
Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu	350	355	360
Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu	365	370	375
Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg	380	385	390
Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp	395	400	405
Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys	410	415	420
Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro	425	430	435
Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser	440	445	450
Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro	455	460	465
Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val	470	475	480
Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His	485	490	495
Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly	500	505	510
Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Gly Leu Gln			

<210> 55
 <211> 644
 <212> DNA
 <213> Homo Sapien

<400> 55
 atcgcatcaa ttgggagtac catcttcctc atgggaccag tgaaacagct 50
 gaagcgaatg tttgagccta ctcgtttgat tgcaactatc atggtgctgt 100
 tgtgttttgc acttaccttg tgttctgcct tttggtggca taacaaggga 150
 cttgcactta tcttctgcat tttgcagtct ttggcattga cgtggtacag 200
 cctttccttc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250
 tgtgtccttg ataattcatg gccagtttta tgaagctttg gaaggcacta 300
 tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350
 tacagacatg tgccttttat cttgcagcaa tgtgttgctt gtgattcgaa 400
 catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450
 cagtagcaca ggatgagaag tgggttctgt atcttggtga gtggaatctt 500
 cctcatgtac ctgtttcctc tctggatggt gtccactga attcccatga 550
 atacaaacct attcagcaac agcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

<210> 56
 <211> 77
 <212> PRT
 <213> Homo Sapien

<400> 56
 Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg
 1 5 10 15
 Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu
 20 25 30
 Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe
 35 40 45
 Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe
 50 55 60
 Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys
 65 70 75
 Leu Ala

<210> 57
<211> 3334
<212> DNA
<213> Homo Sapien

<400> 57
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cccagaccga gttccagtac tttgagtcga aggggctccc tgccgagctg 150
aagtcatttt tcaagctcag tgtcttcac cctcccagg aattctccac 200
ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250
atgggcagct agactttgaa gaatttgtcc attatctcca agatcatgag 300
aagaagctga ggctggtggt taagattttg gacaaaaaga atgatggacg 350
cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400
tatctgaaca gcaggcagaa aaaatttctca agagcatgga taaaaacggc 450
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cgtggaaaac atccccgaga tcctcctcta ctggaagcat tccacgatct 550
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aggcagacgg ggatgtggtg gagacacctg gtggcaggag gtggggcagg 650
ggccgtatcc agaacctgca cggccccctt ggacaggctc aagggtgctca 700
tgcagggtcca tgcctcccgc agcaacaaca tgggcatcgt tgggtggcttc 750
actcagatga ttcgagaagg aggggcccagg tcactctggc ggggcaatgg 800
catcaacgtc ctcaaaattg cccccgaatc agccatcaaa ttcatggcct 850
atgagcagat caagcgcctt gttggtagt accaggagac tctgaggatt 900
cacgagaggc ttgtggcagg gtccttggca ggggccatcg ccagagcag 950
catctaccca atggaggtcc tgaagacctg gatggcgctg cggaagacag 1000
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ctccggaggt gaccatgagc agcctcttca aacatatcct gcggaccgag 1350
 ggggccttcg ggctgtacag ggggctggcc cccaacttca tgaaggcat 1400
 ccagctgtg agcatcagct acgtggctta cgagaacctg aagatcacc 1450
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 ctgatcctgg gccgcagcct ggggtgtgca gccatctcat tctgtgaatg 1550
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 ccagcagacc ctctgttg ttccagcgaa gaccacaggc attccttagg 1700
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 tctgccgtgc atctccctgt gccctcttgc tgccctgctg tctgctgagg 1900
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 ataatccatg atgaaagggt aggtcacgtg gcctcccagg cctgacttcc 2000
 caacctacag cattgacgcc aacttggtg tgaaggaaga ggaaaggatc 2050
 tggccttgtg gtcactggca tctgagccct gctgatggct ggggctctcg 2100
 ggcattgctt ggagtgcagg gggctcgggc tgccctggct ggctgcacag 2150
 aaggcaagt ctggggctca tgggtgctctg agctggcctg gaccctgtca 2200
 ggatgggccc cacctcagaa ccaaactcac tgtcccaact gtggcatgag 2250
 ggcagtggag caccatgttt gagggcgaag ggcagagcgt ttgtgtgttc 2300
 tggggaggga aggaaaagg gttggaggcc ttaattatgg actgttggga 2350
 aaagggtttt gtccagaagg acaagccgga caaatgagcg acttctgtgc 2400
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 ccagccccac attccacttg tgctactgct tggaacctat ttattttgta 2550
 tttatttgaa cagagttatg tctaactat ttttatagat ttgtttaatt 2600
 aatagcttgt cattttcaag ttcatttttt attcatattt atgttcatgg 2650
 ttgattgtac cttcccaagc ccgccagtg ggatgggagg aggaggagaa 2700
 ggggggcctt gggccgctgc agtcacatct gtccagagaa attccttttg 2750

ggactggagg cagaaaagcg gccagaaggc agcagccctg gctcctttcc 2800
 tttggcaggt tggggaaggg cttgccccca gccttaggat ttcagggttt 2850
 gactgggggc gtggagagag agggaggaac ctcaataacc ttgaaggtgg 2900
 aatccagtta tttcctgcgc tgcgagggtt tctttatttc actcttttct 2950
 gaatgtcaag gcagtgaggt gcctctcact gtgaatttgt ggtgggcggg 3000
 ggctggagga gaggggtggg ggctggctcc gtccttccca gccttctgct 3050
 gcccttgctt aacaatgccg gccaaactggc gacctcacgg ttgcacttcc 3100
 attccaccag aatgacctga tgaggaaatc ttcaatagga tgcaaagatc 3150
 aatgcaaaaa ttgttatata tgaacatata actggagtcg tcaaaaagca 3200
 aattaagaaa gaattggacg ttagaagttg tcatttaaag cagccttcta 3250
 ataaagttgt ttcaaagctg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58
 <211> 469
 <212> PRT
 <213> Homo Sapien

<400> 58
 Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln
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 Thr Glu Phe Gln Tyr Phe Glu Ser Lys Gly Leu Pro Ala Glu Leu
 20 25 30
 Lys Ser Ile Phe Lys Leu Ser Val Phe Ile Pro Ser Gln Glu Phe
 35 40 45
 Ser Thr Tyr Arg Gln Trp Lys Gln Lys Ile Val Gln Ala Gly Asp
 50 55 60
 Lys Asp Leu Asp Gly Gln Leu Asp Phe Glu Glu Phe Val His Tyr
 65 70 75
 Leu Gln Asp His Glu Lys Lys Leu Arg Leu Val Phe Lys Ile Leu
 80 85 90
 Asp Lys Lys Asn Asp Gly Arg Ile Asp Ala Gln Glu Ile Met Gln
 95 100 105
 Ser Leu Arg Asp Leu Gly Val Lys Ile Ser Glu Gln Gln Ala Glu
 110 115 120
 Lys Ile Leu Lys Ser Met Asp Lys Asn Gly Thr Met Thr Ile Asp
 125 130 135
 Trp Asn Glu Trp Arg Asp Tyr His Leu Leu His Pro Val Glu Asn

	140	145	150
Ile Pro Glu Ile	Ile Leu Tyr Trp Lys	His Ser Thr Ile Phe	Asp
	155	160	165
Val Gly Glu Asn	Leu Thr Val Pro Asp	Glu Phe Thr Val Glu	Glu
	170	175	180
Arg Gln Thr Gly	Met Trp Trp Arg His	Leu Val Ala Gly Gly	Gly
	185	190	195
Ala Gly Ala Val	Ser Arg Thr Cys Thr	Ala Pro Leu Asp Arg	Leu
	200	205	210
Lys Val Leu Met	Gln Val His Ala Ser	Arg Ser Asn Asn Met	Gly
	215	220	225
Ile Val Gly Gly	Phe Thr Gln Met Ile	Arg Glu Gly Gly Ala	Arg
	230	235	240
Ser Leu Trp Arg	Gly Asn Gly Ile Asn	Val Leu Lys Ile Ala	Pro
	245	250	255
Glu Ser Ala Ile	Lys Phe Met Ala Tyr	Glu Gln Ile Lys Arg	Leu
	260	265	270
Val Gly Ser Asp	Gln Glu Thr Leu Arg	Ile His Glu Arg Leu	Val
	275	280	285
Ala Gly Ser Leu	Ala Gly Ala Ile Ala	Gln Ser Ser Ile Tyr	Pro
	290	295	300
Met Glu Val Leu	Lys Thr Arg Met Ala	Leu Arg Lys Thr Gly	Gln
	305	310	315
Tyr Ser Gly Met	Leu Asp Cys Ala Arg	Arg Ile Leu Ala Arg	Glu
	320	325	330
Gly Val Ala Ala	Phe Tyr Lys Gly Tyr	Val Pro Asn Met Leu	Gly
	335	340	345
Ile Ile Pro Tyr	Ala Gly Ile Asp Leu	Ala Val Tyr Glu Thr	Leu
	350	355	360
Lys Asn Ala Trp	Leu Gln His Tyr Ala	Val Asn Ser Ala Asp	Pro
	365	370	375
Gly Val Phe Val	Leu Leu Ala Cys Gly	Thr Met Ser Ser Thr	Cys
	380	385	390
Gly Gln Leu Ala	Ser Tyr Pro Leu Ala	Leu Val Arg Thr Arg	Met
	395	400	405
Gln Ala Gln Ala	Ser Ile Glu Gly Ala	Pro Glu Val Thr Met	Ser
	410	415	420
Ser Leu Phe Lys	His Ile Leu Arg Thr	Glu Gly Ala Phe Gly	Leu
	425	430	435

Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val
440 445 450

Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly
455 460 465

Val Gln Ser Arg

<210> 59
<211> 1658
<212> DNA
<213> Homo Sapien

<400> 59
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ttccccagcc atggcttccc tggggcagat cctcttctgg agcataatta 100
gcatcatcat tattctggct ggagcaattg cactcatcat tggctttggt 150
atttcagga gacactccat cacagtcact actgtgcct cagctgggaa 200
cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatgtt 350
cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
ctttgcggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
tatatcatca cttctaaagg caaggggaat gctaaccctg agtataaaac 500
tgagagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550
agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtgggtc 600
tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac 650
cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
gcggagtcac ctacagctgc taaactcaaa ggcttctctg tgtgtctctt 850
ctttctttgc catcagctgg gcaattctgc ctctcagccc ttacctgatg 900
ctaaaataat gtgccttggc cacaaaaaag catgcaaagt cattgttaca 950
acagggatct acagaactat ttcaccacca gatatgacct agttttatat 1000
ttctgggagg aatgaattc atatctagaa gtctggagt agcaaacaag 1050
agcaagaaac aaaaagaagc caaagcaga aggctccaat atgaacaaga 1100

taaatctatc ttcaaagaca tattagaagt tgggaaaata attcatgtga 1150
 actagacaag tgtgttaaga gtgataagta aaatgcacgt ggagacaagt 1200
 gcatccccag atctcaggga cctccccctg cctgtcacct ggggagtgag 1250
 aggacaggat agtgcattgt ctttgtctct gaatttttag ttatatgtgc 1300
 tgtaatgttg ctctgaggaa gcccttgaa agtctatccc aacatatcca 1350
 catcttatat tccacaaatt aagctgtagt atgtacccta agacgctgct 1400
 aattgactgc cacttcgcaa ctcaggggcg gctgcatttt agtaatgggt 1450
 caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500
 ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
 acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
 ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaa 1658

<210> 60
 <211> 282
 <212> PRT
 <213> Homo Sapien

<400> 60
 Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile
 1 5 10 15
 Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly
 20 25 30
 Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala
 35 40 45
 Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro
 50 55 60
 Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly
 65 70 75
 Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu
 80 85 90
 Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala
 95 100 105
 Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
 110 115 120
 Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser
 125 130 135
 Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe

	140	145	150
Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr	155	160	165
Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val	170	175	180
Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser	185	190	195
Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val	200	205	210
Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys	215	220	225
Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val	230	235	240
Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn	245	250	255
Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp	260	265	270
Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys	275	280	

<210> 61
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 61
 tgacgtcaga atcaccatgg ccagctatcc ttaccggcag ggctgcccag 50
 gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100
 ccccccaata gtggagggca gtatggtagt gggctacccc ctgggtgggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctgggtggag 200
 ggccctatgg acaccccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagttcctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gctactcct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag cttaaagcagg ccctgggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcacgc atgtctacgg cttctcagcc 550
 ctgtggaaat tcatccagca gtggaagaac ctcttccagc agtatgaccg 600

ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
 aaatgggcta caacctgagc cccagttca cccagcttct ggtctcccg 700
 tactgcccac gctctgcaa tcttgccatg cagcttgacc gttcatcca 750
 ggtgtgcacc cagctgcagg tgctgacaga ggccttccgg gagaaggaca 800
 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
 acagcttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
 cagggacctt tcttggttc ttagagttag agaagtatgt ggacatctct 950
 tcttttctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
 gttccaaaag aggggtggaga gtctgcatc atagccacca aatagtgagg 1050
 accggggctg aggccacaca gataggggccc tgatggagga gaggatagaa 1100
 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
 ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agtccaccc 1200
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 ccctcaccag gccatcctgt caaacgagcc cattttctcc aaagtggaat 1300
 ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
 gccacacca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
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 ctccaggaga cagtggtcac ctctccctgc caatactttt ttttaatttgc 1550
 attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 62
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 62
 Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
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 Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
 20 25 30
 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly

50					55					60				
Gly	Gly	Pro	Tyr	Gly	His	Pro	Asn	Pro	Gly	Met	Phe	Pro	Ser	Gly
				65					70					75
Thr	Pro	Gly	Gly	Pro	Tyr	Gly	Gly	Ala	Ala	Pro	Gly	Gly	Pro	Tyr
				80					85					90
Gly	Gln	Pro	Pro	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Gln	Pro	Gly	Leu
				95					100					105
Tyr	Gly	Gln	Gly	Gly	Ala	Pro	Pro	Asn	Val	Asp	Pro	Glu	Ala	Tyr
				110					115					120
Ser	Trp	Phe	Gln	Ser	Val	Asp	Ser	Asp	His	Ser	Gly	Tyr	Ile	Ser
				125					130					135
Met	Lys	Glu	Leu	Lys	Gln	Ala	Leu	Val	Asn	Cys	Asn	Trp	Ser	Ser
				140					145					150
Phe	Asn	Asp	Glu	Thr	Cys	Leu	Met	Met	Ile	Asn	Met	Phe	Asp	Lys
				155					160					165
Thr	Lys	Ser	Gly	Arg	Ile	Asp	Val	Tyr	Gly	Phe	Ser	Ala	Leu	Trp
				170					175					180
Lys	Phe	Ile	Gln	Gln	Trp	Lys	Asn	Leu	Phe	Gln	Gln	Tyr	Asp	Arg
				185					190					195
Asp	Arg	Ser	Gly	Ser	Ile	Ser	Tyr	Thr	Glu	Leu	Gln	Gln	Ala	Leu
				200					205					210
Ser	Gln	Met	Gly	Tyr	Asn	Leu	Ser	Pro	Gln	Phe	Thr	Gln	Leu	Leu
				215					220					225
Val	Ser	Arg	Tyr	Cys	Pro	Arg	Ser	Ala	Asn	Pro	Ala	Met	Gln	Leu
				230					235					240
Asp	Arg	Phe	Ile	Gln	Val	Cys	Thr	Gln	Leu	Gln	Val	Leu	Thr	Glu
				245					250					255
Ala	Phe	Arg	Glu	Lys	Asp	Thr	Ala	Val	Gln	Gly	Asn	Ile	Arg	Leu
				260					265					270
Ser	Phe	Glu	Asp	Phe	Val	Thr	Met	Thr	Ala	Ser	Arg	Met	Leu	
				275					280					

<210> 63

<211> 1234

<212> DNA

<213> Homo Sapien

<400> 63

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gaggagaaag tttcccaaaa cttcgggacc aacttgctc agctcggaca 150

accttcctcc actggccccct ctaactctga acatccgcag cccgctctgg 200
 accctaggtc taatgacttg gcaaggggtc ctctgaagct cagcgtgcct 250
 ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300
 tccatcgtgg gggctgcctg ccatggattc ctggccccct gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgtgcct 400
 gaagaactct cttacctctc cagtgcctgc gccctcgtc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550
 tctctgggag ccgggggaaa aatcctttcc caacgcctc cctgggtctt 600
 catccacagg gttctgcctg atcaccctg gggtagcctg aatcccagt 650
 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggcccatg 700
 ccacaccctg agggaatctg gggtagcctg aatcaacccc caggtagcag 750
 ctgggggaaat attaatcggg atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg gggaatatta atcggtagcc aggaggcagc 850
 tgggggaata ttcactata cccaggtagc aataacccat ttcctcctgg 900
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 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtgggctca 1050
 atccaggccc tggttaacatg tttccagcac tatccccact tttcagtgc 1100
 tcccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
 Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
 1 5 10 15
 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45

Gln	Leu	Gly	Gln	Pro	Ser	Ser	Thr	Gly	Pro	Ser	Asn	Ser	Glu	His	
				50					55					60	
Pro	Gln	Pro	Ala	Leu	Asp	Pro	Arg	Ser	Asn	Asp	Leu	Ala	Arg	Val	
				65					70					75	
Pro	Leu	Lys	Leu	Ser	Val	Pro	Pro	Ser	Asp	Gly	Phe	Pro	Pro	Ala	
				80					85					90	
Gly	Gly	Ser	Ala	Val	Gln	Arg	Trp	Pro	Pro	Ser	Trp	Gly	Leu	Pro	
				95					100					105	
Ala	Met	Asp	Ser	Trp	Pro	Pro	Glu	Asp	Pro	Trp	Gln	Met	Met	Ala	
				110					115					120	
Ala	Ala	Ala	Glu	Asp	Arg	Leu	Gly	Glu	Ala	Leu	Pro	Glu	Glu	Leu	
				125					130					135	
Ser	Tyr	Leu	Ser	Ser	Ala	Ala	Ala	Leu	Ala	Pro	Gly	Ser	Gly	Pro	
				140					145					150	
Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	
				155					160					165	
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	
				170					175					180	
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	
				185					190					195	
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	
				200					205					210	
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	
				215					220					225	
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	
				230					235					240	
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	
				245					250					255	
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	
				260					265					270	
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	
				275					280					285	
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	
				290					295					300	
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	
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<210> 65

<211> 422
 <212> DNA
 <213> Homo Sapien

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 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgccctctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttgggcccgg ggatgcagga 350
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 ataaataaaa ttcggtatgc tg 422

<210> 66
 <211> 78
 <212> PRT
 <213> Homo Sapien

<400> 66
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 20 25 30
 Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
 35 40 45
 Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
 50 55 60
 Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
 65 70 75
 Cys Asn Thr

<210> 67
 <211> 744
 <212> DNA
 <213> Homo Sapien

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 <211> 123
 <212> PRT
 <213> Homo Sapien

<400> 68
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 35 40 45
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
 50 55 60
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
 65 70 75
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
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 Leu Pro Ile

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<211> 3265
<212> DNA
<213> Homo Sapien

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<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

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Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp	35	40	45	
Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser	50	55	60	
Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn	65	70	75	
Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr	80	85	90	
Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val	95	100	105	
Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln	110	115	120	
Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro	125	130	135	
Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly	140	145	150	
Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	155	160	165	

Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys	
				170					175					180	
Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn	
				185					190					195	
Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys	
				200					205					210	
Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe	
				215					220					225	
Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met	
				230					235					240	
Gln	Ser	Ile	Asp	Ser	Val	Val	Glu	Phe	Cys	Asn	Glu	Lys	Thr	His	
				245					250					255	
Asn	Gln	Glu	Ala	Pro	Ser	Leu	Gln	Asn	Ile	Lys	Cys	Asn	Phe	Arg	
				260					265					270	
Ser	Thr	Trp	Glu	Val	Ile	Ser	Asn	Ser	Glu	Asp	Phe	Lys	Asn	Thr	
				275					280					285	
Ile	Pro	Met	Val	Thr	Pro	Pro	Pro	Pro	Pro	Val	Phe	Ser	Leu	Leu	
				290					295					300	
Lys	Ile	Ser	Gln	Arg	Ile	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	Gly	
				305					310					315	
Ser	Met	Gly	Gly	Lys	Asp	Arg	Leu	Asn	Arg	Met	Asn	Gln	Ala	Ala	
				320					325					330	
Lys	His	Phe	Leu	Leu	Gln	Thr	Val	Glu	Asn	Gly	Ser	Trp	Val	Gly	
				335					340					345	
Met	Val	His	Phe	Asp	Ser	Thr	Ala	Thr	Ile	Val	Asn	Lys	Leu	Ile	
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Gln	Ile	Lys	Ser	Ser	Asp	Glu	Arg	Asn	Thr	Leu	Met	Ala	Gly	Leu	
				365					370					375	
Pro	Thr	Tyr	Pro	Leu	Gly	Gly	Thr	Ser	Ile	Cys	Ser	Gly	Ile	Lys	
				380					385					390	
Tyr	Ala	Phe	Gln	Val	Ile	Gly	Glu	Leu	His	Ser	Gln	Leu	Asp	Gly	
				395					400					405	
Ser	Glu	Val	Leu	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	Thr	Ala	Ser	
				410					415					420	
Ser	Cys	Ile	Asp	Glu	Val	Lys	Gln	Ser	Gly	Ala	Ile	Val	His	Phe	
				425					430					435	
Ile	Ala	Leu	Gly	Arg	Ala	Ala	Asp	Glu	Ala	Val	Ile	Glu	Met	Ser	
				440					445					450	
Lys	Ile	Thr	Gly	Gly	Ser	His	Phe	Tyr	Val	Ser	Asp	Glu	Ala	Gln	

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				470					475					480					
Thr	Asp	Leu	Ser	Gln	Lys	Ser	Leu	Gln	Leu	Glu	Ser	Lys	Gly	Leu					
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Thr	Leu	Asn	Ser	Asn	Ala	Trp	Met	Asn	Asp	Thr	Val	Ile	Ile	Asp					
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Ser	Thr	Val	Gly	Lys	Asp	Thr	Phe	Phe	Leu	Ile	Thr	Trp	Asn	Ser					
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Leu	Pro	Pro	Ser	Ile	Ser	Leu	Trp	Asp	Pro	Ser	Gly	Thr	Ile	Met					
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Glu	Asn	Phe	Thr	Val	Asp	Ala	Thr	Ser	Lys	Met	Ala	Tyr	Leu	Ser					
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Ile	Pro	Gly	Thr	Ala	Lys	Val	Gly	Thr	Trp	Ala	Tyr	Asn	Leu	Gln					
				560					565					570					
Ala	Lys	Ala	Asn	Pro	Glu	Thr	Leu	Thr	Ile	Thr	Val	Thr	Ser	Arg					
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Ala	Ala	Asn	Ser	Ser	Val	Pro	Pro	Ile	Thr	Val	Asn	Ala	Lys	Met					
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Asn	Lys	Asp	Val	Asn	Ser	Phe	Pro	Ser	Pro	Met	Ile	Val	Tyr	Ala					
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Glu	Ile	Leu	Gln	Gly	Tyr	Val	Pro	Val	Leu	Gly	Ala	Asn	Val	Thr					
				620					625					630					
Ala	Phe	Ile	Glu	Ser	Gln	Asn	Gly	His	Thr	Glu	Val	Leu	Glu	Leu					
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Leu	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ser	Phe	Lys	Asn	Asp	Gly	Val					
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Tyr	Ser	Arg	Tyr	Phe	Thr	Ala	Tyr	Thr	Glu	Asn	Gly	Arg	Tyr	Ser					
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Leu	Lys	Val	Arg	Ala	His	Gly	Gly	Ala	Asn	Thr	Ala	Arg	Leu	Lys					
				680					685					690					
Leu	Arg	Pro	Pro	Leu	Asn	Arg	Ala	Ala	Tyr	Ile	Pro	Gly	Trp	Val					
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Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asp					
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Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser					
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Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro					
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Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val
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His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn
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Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala
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Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val
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Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His
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				845					850					855
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala
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Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro
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Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu
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 <211> 3877
 <212> DNA
 <213> Homo Sapien

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 ttatgagaac tttcagttca aagcatcaaa ttgatgccat atccaaggac 3050
 atgccaaatg ctgattctgt caggcactga atgtcaggca ttgagacata 3100
 ggggaaggaa ggtttgtact aatacagacg tacagatact ttctctgaag 3150
 agtattttcg aagaggagca actgaacact ggaggaaaag aaaatgacac 3200
 tttctgcttt acagaaaagg aaactcattc agactggtga tatcgtgatg 3250
 tacctaaaag tcagaaacca ctttttctcc tcagaagtag ggaccgcttt 3300

cttacctgtt taaataaacc aaagtatacc gtgtgaacca aacaatctct 3350
 tttcaaaaaca ggggtgctcct cctggcttct ggcttccata agaagaaatg 3400
 gagaaaaata tatatatata tatatatatt gtgaaagatc aatccatctg 3450
 ccagaatcta gtgggatgga agtttttgct acatgttatc caccacaggc 3500
 cagggtggaag taactgaatt atttttttaa ttaagcagtt ctactcaatc 3550
 accaagatgc ttctgaaaat tgcattttat taccatttca aactattttt 3600
 taaaaataaa tacagttaac atagagtggg ttcttcattc atgtgaaaat 3650
 tattagccag caccagatgc atgagcta atctctcttg agtccttgct 3700
 tctgtttgct cacagtaaac tcattgttta aaagcttcaa gaacattcaa 3750
 gctgttggtg tggtaaaaaa tgcattgtat tgatttgtac tggtagttta 3800
 tgaaatttaa ttaaacaca ggccatgaat ggaaggtggg attgcacagc 3850
 taataaaata tgatttgtgg atatgaa 3877

<210> 72
 <211> 532
 <212> PRT
 <213> Homo Sapien

<400> 72
 Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val
 1 5 10 15
 Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr
 20 25 30
 Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu
 35 40 45
 Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
 50 55 60
 Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
 65 70 75
 Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
 80 85 90
 Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
 95 100 105
 Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
 110 115 120
 Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
 125 130 135
 Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser

	140		145		150
Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg	155		160		165
His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu	170		175		180
Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala	185		190		195
Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp Phe Ile	200		205		210
Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr Glu	215		220		225
Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile	230		235		240
Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys	245		250		255
Leu Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala	260		265		270
Lys Arg Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu	275		280		285
Met Cys Ile Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr	290		295		300
Phe Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn	305		310		315
Thr Ser Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu	320		325		330
Asn Gly Glu Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg	335		340		345
Phe Trp Lys Gly Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp	350		355		360
Ile Tyr Phe Thr Ser Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr	365		370		375
Gln Pro Gly Lys Lys Val Phe Tyr Pro Val Leu Phe Ser Gln Tyr	380		385		390
Asn Pro Gly Ile Ile Tyr Gly His His Asp Ala Val Pro Pro Leu	395		400		405
Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly Phe Trp Arg Asp	410		415		420
Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Ile Asn	425		430		435

Ile	Gly	Gly	Phe	Asp	Leu	Asp	Ile	Lys	Gly	Trp	Gly	Gly	Glu	Asp	
				440					445					450	
Val	His	Leu	Tyr	Arg	Lys	Tyr	Leu	His	Ser	Asn	Leu	Ile	Val	Val	
				455					460					465	
Arg	Thr	Pro	Val	Arg	Gly	Leu	Phe	His	Leu	Trp	His	Glu	Lys	Arg	
				470					475					480	
Cys	Met	Asp	Glu	Leu	Thr	Pro	Glu	Gln	Tyr	Lys	Met	Cys	Met	Gln	
				485					490					495	
Ser	Lys	Ala	Met	Asn	Glu	Ala	Ser	His	Gly	Gln	Leu	Gly	Met	Leu	
				500					505					510	
Val	Phe	Arg	His	Glu	Ile	Glu	Ala	His	Leu	Arg	Lys	Gln	Lys	Gln	
				515					520					525	
Lys	Thr	Ser	Ser	Lys	Lys	Thr									
				530											

<210> 73
 <211> 1701
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1528
 <223> unknown base

<400> 73
 gagactgcag agggagataa agagagaggg caaagaggca gcaagagatt 50
 tgtcctgggg atccagaaac ccatgatacc ctactgaaca ccgaatcccc 100
 tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacact 150
 cacgccagga gctcgtctgc tctctctctc tctctctcac tctcctctcc 200
 ctctctctct gcctgtccta gtcctctagt cctcaaattc ccagtccctc 250
 gcaccccttc ctgggacact atgttggtct ccgccctcct gctggaggtg 300
 atttggatcc tggctgcaga tgggggtcaa cactggacgt atgagggccc 350
 acatggtcag gaccattggc cagcctctta ccctgagtgt ggaaacaatg 400
 cccagtcgcc catcgatatt cagacagaca gtgtgacatt tgaccctgat 450
 ttgctgtctc tgcagcccca cggatatgac cagcctggca ccgagccttt 500
 ggacctgcac aacaatggcc acacagtgc actctctctg cctctaccc 550
 tgtatctggg tggacttccc cgaaaatatg tagctgcca gctccacctg 600
 cactggggtc agaaaggatc ccagggggg tcagaacacc agatcaacag 650

tgaagccaca tttgcagagc tccacattgt acattatgac tctgattcct 700
 atgacagctt gaggtaggct gctgagaggc ctcagggcct ggctgtcctg 750
 ggcacccata ttgaggtggg tgagactaag aatatagctt atgaacacat 800
 tctgagtcac ttgcatgaag tcaggcataa agatcagaag acctcagtgc 850
 ctcccttcaa cctaagagag ctgctcccca aacagctggg gcagtacttc 900
 cgctacaatg gctcgctcac aactccccct tgctaccaga gtgtgctctg 950
 gacagttttt tatagaaggt cccagatttc aatggaacag ctggaaaagc 1000
 ttcaggggac attgttctcc acagaagagg agccctctaa gcttctggta 1050
 cagaactacc gagcccttca gcctctcaat cagcgcattg tctttgcttc 1100
 tttcatccaa gcaggatcct cgtataccac aggtgaaatg ctgagtctag 1150
 gtgtaggaat cttggttggc tgtctctgcc ttctcctggc tgtttatttc 1200
 attgctagaa agattcggaa gaagaggctg gaaaaccgaa agagtgtggg 1250
 cttcacctca gcacaagcca cgactgaggc ataaattcct tctcagatac 1300
 catggatgtg gatgacttcc cttcatgcct atcaggaagc ctctaaaatg 1350
 ggggtgtaga tctggccaga aacactgtag gagtagtaag cagatgtcct 1400
 ccttccccctg gacatctctt agagaggaat ggaccaggc tgtcattcca 1450
 ggaagaactg cagagccttc agcctctcca aacatgtagg aggaaatgag 1500
 gaaatcgctg tggtgttaat gcagaganca aactctgttt agttgcaggg 1550
 gaagtttggg atatacccca aagtcctcta cccctcact tttatggccc 1600
 tttccctaga tatactgagg gatctctcct taggataaag agttgctggt 1650
 gaagttgtat atttttgatc aatatatttg gaaattaaag tttctgactt 1700
 t 1701

<210> 74
 <211> 337
 <212> PRT
 <213> Homo Sapien

<400> 74
 Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
 1 5 10 15
 Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
 20 25 30
 Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
 35 40 45

Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
 50 55 60
 Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
 65 70 75
 Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu
 80 85 90
 Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala
 95 100 105
 Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly
 110 115 120
 Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His
 125 130 135
 Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala
 140 145 150
 Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu
 155 160 165
 Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His
 170 175 180
 Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro
 185 190 195
 Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe
 200 205 210
 Arg Tyr Asn Gly Ser Leu Thr Thr Pro Pro Cys Tyr Gln Ser Val
 215 220 225
 Leu Trp Thr Val Phe Tyr Arg Arg Ser Gln Ile Ser Met Glu Gln
 230 235 240
 Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr Glu Glu Glu Pro
 245 250 255
 Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln Pro Leu Asn
 260 265 270
 Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser Ser Tyr
 275 280 285
 Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val Gly
 290 295 300
 Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile
 305 310 315
 Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser
 320 325 330
 Ala Gln Ala Thr Thr Glu Ala

<210> 75
 <211> 1743
 <212> DNA
 <213> Homo Sapien

<400> 75
 tgccgctgcc gccgctgctg ctgttgctcc tggcggcgcc ttggggacgg 50
 gcagttccct gtgtctctgg tggtttgcct aaacctgcaa acatcacctt 100
 cttatccatc aacatgaaga atgtcctaca atggactcca ccagagggtc 150
 ttcaaggagt taaagttact tacactgtgc agtatttcat cacaaattgg 200
 cccaccagag gtggcactga ctacagatga gaagtccatt tctgttgctc 250
 tgacagctcc agagaagtgg aagagaaatc cagaagacct tcctgtttcc 300
 atgcaacaaa tatactccaa tctgaagtat aacgtgtctg tgttgaatac 350
 taaatcaaac agaacgtggc cccagtgtgt gaccaaccac acgctggctg 400
 tcacctggct ggagccgaac actctttact gcgtacacgt ggagtccttc 450
 gtcccagggc cccctcgccg tgctcagcct tctgagaagc agtgtgccag 500
 gactttgaaa gatcaatcat cagagttcaa ggctaaaatc atcttctggc 550
 atgttttgcc catatctatt accgtgtttc ttttttctgt gatgggctat 600
 tccatctacc gatatatcca cgttggcaaa gagaaacacc cagcaaattt 650
 gattttgatt tatggaaatg aatttgacaa aagattcttt gtgcctgctg 700
 aaaaaatcgt gattaacttt atcacctca atatctcgga tgattctaaa 750
 atttctcatc aggatatgag tttactggga aaaagcagtg atgtatccag 800
 ccttaatgat cctcagccca gcgggaacct gagggcccct caggaggaag 850
 aggaggtgaa acatttaggg tatgcttcgc atttgatgga aattttttgt 900
 gactctgaag aaaacacgga aggtacttct ctcaccagc aagagtcctt 950
 cagcagaaca atacccccgg ataaaacagt cattgaatat gaatatgatg 1000
 tcagaaccac tgacatttgt gcggggcctg aagagcagga gctcagtttg 1050
 caggaggagg tgtccacaca aggaacatta ttggagtcgc aggcagcggt 1100
 ggcagtcttg ggcccgcaaa cgttacagta ctcatacacc cctcagctcc 1150
 aagacttaga ccccttggcg caggagcaca cagactcgga ggaggggccc 1200
 gaggaagagc catcgacgac cctggtcgac tgggatcccc aaactggcag 1250

gctgtgtatt ccttcgctgt ccagcttcga ccaggattca gagggctgcg 1300
agcctttctga ggggggatggg ctccggagagg aggggtcttct atctagactc 1350
tatgaggagc cggctccaga caggccacca ggagaaaatg aaacctatct 1400
catgcaattc atggaggaat ggggggttata tgtgcagatg gaaaactgat 1450
gccaaacttt ccttttgcct tttgtttcct gtgcaaacia gtgagtcacc 1500
cctttgatcc cagccataaa gtacctggga tgaaagaagt tttttccagt 1550
ttgtcagtgt ctgtgagaat tacttatttc ttttctctat tctcatagca 1600
cgtgtgtgat tgggtcatgc atgtaggctc cttaacaatg atgggtgggcc 1650
tctggagtcc aggggctggc cgggtgttct atgcagagaa agcagtcaat 1700
aatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76
<211> 442
<212> PRT
<213> Homo Sapien

<400> 76
Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys
1 5 10 15
Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30
Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45
Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60
Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75
Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90
Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
95 100 105
His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
110 115 120
Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
125 130 135
Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
140 145 150
Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
155 160 165

Ile	His	Val	Gly	Lys	Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile		170	175	180
Tyr	Gly	Asn	Glu	Phe	Asp	Lys	Arg	Phe	Phe	Val	Pro	Ala	Glu	Lys		185	190	195
Ile	Val	Ile	Asn	Phe	Ile	Thr	Leu	Asn	Ile	Ser	Asp	Asp	Ser	Lys		200	205	210
Ile	Ser	His	Gln	Asp	Met	Ser	Leu	Leu	Gly	Lys	Ser	Ser	Asp	Val		215	220	225
Ser	Ser	Leu	Asn	Asp	Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro		230	235	240
Gln	Glu	Glu	Glu	Glu	Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu		245	250	255
Met	Glu	Ile	Phe	Cys	Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser		260	265	270
Leu	Thr	Gln	Gln	Glu	Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys		275	280	285
Thr	Val	Ile	Glu	Tyr	Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys		290	295	300
Ala	Gly	Pro	Glu	Glu	Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser		305	310	315
Thr	Gln	Gly	Thr	Leu	Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu		320	325	330
Gly	Pro	Gln	Thr	Leu	Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp		335	340	345
Leu	Asp	Pro	Leu	Ala	Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro		350	355	360
Glu	Glu	Glu	Pro	Ser	Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr		365	370	375
Gly	Arg	Leu	Cys	Ile	Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser		380	385	390
Glu	Gly	Cys	Glu	Pro	Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly		395	400	405
Leu	Leu	Ser	Arg	Leu	Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro		410	415	420
Gly	Glu	Asn	Glu	Thr	Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly		425	430	435
Leu	Tyr	Val	Gln	Met	Glu	Asn										440		

<210> 77

<211> 1636
<212> DNA
<213> Homo Sapien

<400> 77
gaggagcggg ccgaggactc cagcgtgccc aggtctggca tcttgcactt 50
gctgccctct gacacctggg aagatggccg gcccgaggac cttcaccctt 100
ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150
tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300
ggtgaacacc gtcctgaagc acatcatctg gctgaaggct atcacagcta 350
acatcctcca gctgcagggtg aagccctcgg ccaatgacca ggagctgcta 400
gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctggtcaa 450
gaccatcgtg gagttccaca tgacgactga ggcccaagcc accatccgca 500
tggacaccag tgcaagtggc cccaccgcgc tggtcctcag tgactgtgcc 550
accagccatg ggagcctgcg catccaactg ctgtataagc tctccttctt 600
ggtgaacgcc ttagctaagc aggtcatgaa cctcctagtg ccatccctgc 650
ccaatctagt gaaaaaccag ctgtgtcccg tgatcgaggc ttccttcaat 700
ggcatgtatg cagacctcct gcagctgggtg aagggtgcca tttccctcag 750
cattgaccgt ctggagtttg accttctgta tcttgccatc aagggtgaca 800
ccattcagct ctacctgggg gccaaagtgt tggactcaca gggaaagggtg 850
accaagtggg tcaataactc tgcagcttcc ctgacaatgc ccacctgga 900
caacatccccg ttcagcctca tcgtgagtcg ggacgtgggtg aaagctgcag 950
tggtgtgtgt gctctctcca gaagaattca tggctcctgtt ggactctgtg 1000
cttctgaga gtgcccacgc gctgaagtca agcatcgggc tgatcaatga 1050
aaaggctgca gataagctgg gatctacca gatcgtgaag atcctaactc 1100
aggacactcc cgagtttttt atagaccaag gccatgcca ggtggcccaa 1150
ctgatcgtgc tggaagtgtt tccctccagt gaagccctcc gccctttgtt 1200
caccctgggc atcgaagcca gctcggagc tcagttttac accaaagggtg 1250
accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300
atgaactctg ggattggctg gttccaacct gatgttctga aaaacatcat 1350

cactgagatc atccactcca tctgtgtgcc gaaccagaat ggcaaattaa 1400
gatctgggggt cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450
gagtcctcac tgaccaagga tgcccttgtg cttactccag cctccttgtg 1500
gaaaccacgc tctcctgtct cccagtgaag acttggatgg cagccatcag 1550
ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
cctctctgca atcaataaac acttgctgtg gaaaaa 1636

<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
1 5 10 15
Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
20 25 30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
35 40 45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

	200	205	210
Met Tyr Ala Asp	Leu Leu Gln Leu Val 215	Lys Val Pro Ile Ser 220	Leu 225
Ser Ile Asp Arg	Leu Glu Phe Asp Leu 230	Leu Tyr Pro Ala Ile 235	Lys 240
Gly Asp Thr Ile	Gln Leu Tyr Leu Gly 245	Ala Lys Leu Leu Asp 250	Ser 255
Gln Gly Lys Val	Thr Lys Trp Phe Asn 260	Asn Ser Ala Ala Ser 265	Leu 270
Thr Met Pro Thr	Leu Asp Asn Ile Pro 275	Phe Ser Leu Ile Val 280	Ser 285
Gln Asp Val Val	Lys Ala Ala Val Ala 290	Ala Val Leu Ser Pro 295	Glu 300
Glu Phe Met Val	Leu Leu Asp Ser Val 305	Leu Pro Glu Ser Ala 310	His 315
Arg Leu Lys Ser	Ser Ile Gly Leu Ile 320	Asn Glu Lys Ala Ala 325	Asp 330
Lys Leu Gly Ser	Thr Gln Ile Val Lys 335	Ile Leu Thr Gln Asp 340	Thr 345
Pro Glu Phe Phe	Ile Asp Gln Gly His 350	Ala Lys Val Ala Gln 355	Leu 360
Ile Val Leu Glu	Val Phe Pro Ser Ser 365	Glu Ala Leu Arg Pro 370	Leu 375
Phe Thr Leu Gly	Ile Glu Ala Ser Ser 380	Glu Ala Gln Phe Tyr 385	Thr 390
Lys Gly Asp Gln	Leu Ile Leu Asn Leu 395	Asn Asn Ile Ser Ser 400	Asp 405
Arg Ile Gln Leu	Met Asn Ser Gly Ile 410	Gly Trp Phe Gln Pro 415	Asp 420
Val Leu Lys Asn	Ile Ile Thr Glu Ile 425	Ile His Ser Ile Leu 430	Leu 435
Pro Asn Gln Asn	Gly Lys Leu Arg Ser 440	Gly Val Pro Val Ser 445	Leu 450
Val Lys Ala Leu	Gly Phe Glu Ala Ala 455	Glu Ser Ser Leu Thr 460	Lys 465
Asp Ala Leu Val	Leu Thr Pro Ala Ser 470	Leu Trp Lys Pro Ser 475	Ser 480
Pro Val Ser Gln			

<210> 79
<211> 1475
<212> DNA
<213> Homo Sapien

<400> 79
gagagaagtc agcctggcag agagactctg aaatgagggg ttagaggtgt 50
tcaaggagca agagcttcag cctgaagaca agggagcagt ccctgaagac 100
gcttctactg agaggtctgc catggcctct cttggcctcc aacttgtggg 150
ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
catcacccag tgtgacatct atagcaccct tctgggcctg cccgctgaca 350
tccaggctgc ccaggccatg atggtgacat ccagtgcaat ctctccctg 400
gcctgcatta tctctgtggt gggcatgaga tgcacagtct tctgccagga 450
atcccagacc aaagacagag tggcggtagc aggtggagtc tttttcatcc 500
ttggaggcct cctgggattc attcctgttg cctggaatct tcatgggac 550
ctacgggact tctactcacc actggtgcct gacagcatga aatttgagat 600
tgagagaggt ctttacttgg gcattatttc ttccctgttc tccctgatag 650
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cagggtatgt gtgaagaacc agggggccaga gctggggggg ggctgggtct 850
gtgaaaaaca gtggacagca ccccgagggc cacagggtgag ggacactacc 900
actggatcgt gtcagaaggt gctgctgagg atagactgac tttggccatt 950
ggattgagca aaggcagaaa tgggggctag tgtaacagca tgcaggttga 1000
attgccaagg atgctcgcca tgccagcctt tctgttttcc tcaccttgct 1050
gctcccctgc cctaagtccc caaccctcaa cttgaaaccc cattccctta 1100
agccaggact cagaggatcc ctttgccctc tggtttacct gggactccat 1150
ccccaaaccc actaatcaca tccactgac tgaccctctg tgatcaaaga 1200
ccctctctct ggctgaggtt ggctcttagc tcattgctgg ggatgggaag 1250
gagaagcagt ggcttttgtg ggcattgctc taacctactt ctcaagcttc 1300

cctccaaaga aactgattgg ccctggaacc tccatccac tcttggtatg 1350
 actccacagt gtccagacta atttgtgcat gaactgaaat aaaaccatcc 1400
 tacggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450
 gcagcctggg acatttaaaa aaata 1475

<210> 80
 <211> 230
 <212> PRT
 <213> Homo Sapien

<400> 80
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 1 5 10
 Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp 30
 20 25
 Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly 45
 35 40
 Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly 60
 50 55
 Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala 75
 65 70
 Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile 90
 80 85
 Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr 105
 95 100
 Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala 120
 110 115
 Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro 135
 125 130
 Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro 150
 140 145
 Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr 165
 155 160
 Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile 180
 170 175
 Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr 195
 185 190
 Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg 210
 200 205
 Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser 225
 215 220

Leu Thr Gly Tyr Val
230

<210> 81
<211> 1732
<212> DNA
<213> Homo Sapien

<400> 81
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cttagacctc ccttcctgcc ctcttttctt gccaccgct gcttcttggc 150
ccttctccga ccccgctcta gcagcagacc tcctgggggc tgtgggttga 200
tctgtggccc ctgtgcctcc gtgtcctttt cgtctccctt cctcccgact 250
ccgctcccg accagcggcc tgaccctggg gaaaggatgg ttcccgaggt 300
gagggtcctc tcctccttgc tgggactcgc gctgctctgg ttccccctgg 350
actcccacgc tcgagcccgc ccagacatgt tctgcctttt ccatgggaag 400
agatactccc ccggcgagag ctggcacccc tacttgagc cacaaggcct 450
gatgtactgc ctgcgctgta cctgctcaga gggcgcccat gtgagttgtt 500
accgcctcca ctgtccgct gtccactgcc cccagcctgt gacggagcca 550
cagcaatgct gtcccaagtg tgtggaacct cacactcct ctggactccg 600
ggccccacca aagtctgcc agcacaacgg gaccatgtac caacacggag 650
agatcttcag tgcccatgag ctgttccct cccgcctgcc caaccagtgt 700
gtcctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750
ccccgaacca ggctgccag caccctccc actgccagac tcctgctgcc 800
aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
cagtcgtccc atggggtgag acatcctcag gatccatgtt ccagtgatgc 900
tgggagaaag agaggcccg gcacccacgc cccactggc ctcagcgccc 950
ctctgagctt catccctcgc cacttcagac ccaagggagc aggcagcaca 1000
actgtcaaga tcgtcctgaa ggagaaacat aagaaagcct gtgtgcatgg 1050
cgggaagacg tactccacg gggaggtgtg gcacccggcc ttccgtgcct 1100
tcggccccct gccctgcac ctatgcacct gtgaggatgg ccgccaggac 1150
tgccagcgtg tgacctgtcc caccgagtac cctgcccgc accccgagaa 1200
agtggctggg aagtgtgca agatttgccc agaggacaaa gcagaccctg 1250

gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
 ctcgtccaca catcggtatc cccaagccca gacaacctgc gtcgctttgc 1350
 cctggaacac gaggcctcgg acttggtgga gatctacctc tggaagctgg 1400
 taaaagatga ggaaactgag gctcagagag gtgaagtacc tggcccaagg 1450
 ccacacagcc agaatcttcc acttgactca gatcaagaaa gtcaggaagc 1500
 aagacttcca gaaagaggca cagcacttcc gactgctcgc tggccccccac 1550
 gaaggtcact ggaacgtctt cctagcccag accctggagc tgaaggtcac 1600
 ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650
 gatatgagct gtataattgt tgttattata tattaataaa taagaagttg 1700
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 82
 <211> 451
 <212> PRT
 <213> Homo Sapien

<400> 82
 Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
 1 5 10 15
 Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
 20 25 30
 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
 35 40 45
 Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
 50 55 60
 Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
 65 70 75
 Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
 80 85 90
 Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
 95 100 105
 Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 110 115 120
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
 125 130 135
 Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys
 140 145 150
 Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro
 155 160 165

Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu	170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg	185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly	200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe	215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val	230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly	245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg	260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly	275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys	290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro	305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg	320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser	335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala	350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu	365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His	380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala	395	400	405
Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro	410	415	420
Pro	Arg	Arg	Ser	Leu	Glu	Arg	Leu	Pro	Ser	Pro	Asp	Pro	Gly	Ala	425	430	435
Glu	Gly	His	Gly	Gln	Ser	Arg	Gln	Ser	Asp	Gln	Asp	Ile	Thr	Lys	440	445	450

Thr

<210> 83
<211> 2052
<212> DNA
<213> Homo Sapien

<400> 83
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gttctcctct tctctctaata ccatccgtca cctctcctgt catccgtttc 150
catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
ttggttctga gtctcctcaa gctgggatca gggcagtggc aggtgtttgg 250
gccagacaag cctgtccagg ccttgggtggg ggaggacgca gcattctcct 300
gtttcctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350
agggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450
attctattgc ggaggggggc atctctctga ggctggaaaa cattactgtg 500
ttggatgctg gcctctatgg gtgcaggatt agttcccagt cttactacca 550
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tttccatcac gggatatgtt gatagagaca tccagctact ctgtcagttc 650
tcgggctggt tccccgggc cacagcgaag tggaaaggtc cacaaggaca 700
ggatttgtcc acagactcca ggacaaacag agacatgcac ggctgtttg 750
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tccatgcggc atgtcatct gagccgagag gtggaatcca gggtagagat 850
aggagatacc tttttcgagc ctatatcgtg gcacctggct accaaagtac 900
tgggaatact ctgtgtggc ctattttttg gcattgttgg actgaagatt 950
ttcttctcca aattccagtg gaaaatccag gcggaactgg actggagaag 1000
aaagcacgga caggcagaat tgagagacgc ccggaaacac gcagtggagg 1050
tgactctgga tccagagacg gtcacccga agctctgcgt ttctgatctg 1100
aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150
gagatttaca aggaagagtg tgggtggcttc tcagagtttc caagcaggga 1200
aacattactg ggaggtggac ggaggacaca ataaaagggt gcgctggga 1250
gtgtgccggg atgatgtgga caggaggaag gactacgtga ctttgtctcc 1300

cgatcatggg tactgggtcc tcagactgaa tggagaacat ttgtatttca 1350
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 ataggggtct tcctggacta tgagtgtggg accatctcct tcttcaacat 1450
 aaatgaccag tcccttattt ataccctgac atgtcgggtt gaaggcttat 1500
 tgaggcccta cattgagtat ccgtcctata atgagcaaaa tggaactccc 1550
 atagtcattc gccagtcac ccaggaatca gagaaagagg cctcttggca 1600
 aagggcctct gcaatcccag agacaagcaa cagtgagtcc tcctcacagg 1650
 caaccacgcc ctctctcccc aggggtgaaa tgtaggatga atcacatccc 1700
 acattcttct ttagggatat taaggctctc ctcccagatc caaagtcccg 1750
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 atgggagtca ggtgtcatgg ctgccctgag ctgggagggg agaaggctga 1850
 cattacattt agtttgcctc cactccatct ggctaagtga tcttgaaata 1900
 ccacctctca ggtgaagaac cgtcaggaat tcccatctca caggctgtgg 1950
 tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000
 acagagtgta tcctaattgg ttgttcatta tattacactt tcagtaaaaa 2050
 aa 2052

<210> 84
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 84
 Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly
 1 5 10 15
 Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
 20 25 30
 Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
 35 40 45
 Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe
 50 55 60
 Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe
 65 70 75
 Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp
 80 85 90
 Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr
 95 100 105

Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser		110	115	120
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly		125	130	135
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile		140	145	150
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala		155	160	165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg		170	175	180
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu		185	190	195
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His		200	205	210
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp		215	220	225
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu		230	235	240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys		245	250	255
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp		260	265	270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys		275	280	285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys		290	295	300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro		305	310	315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val		320	325	330
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val		335	340	345
Asp	Gly	Gly	His	Asn	Lys	Arg	Trp	Arg	Val	Gly	Val	Cys	Arg	Asp		350	355	360
Asp	Val	Asp	Arg	Arg	Lys	Glu	Tyr	Val	Thr	Leu	Ser	Pro	Asp	His		365	370	375
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Asn	Gly	Glu	His	Leu	Tyr	Phe	Thr		380	385	390
Leu	Asn	Pro	Arg	Phe	Ile	Ser	Val	Phe	Pro	Arg	Thr	Pro	Pro	Thr				

	395	400	405
Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe	410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg	425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn	440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu	455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu	470	475	480
Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu	485	490	495
Pro Arg Gly Glu Met	500		

<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
 aacagacgtt ccctcgcggc cctggcacct ctaaccccag acatgctgct 50
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 gtaaactgct gacgatgcag agttccgtga cgggtgcagga aggcctgtgt 150
 gtccatgtgc cctgctcctt ctcctacccc tcgcatggct ggatttacct 200
 tggcccagta gtccatggct actgggtccg ggaaggggccc aatacagacc 250
 aggatgctcc agtggccaca aacaacccag ctcgggcagt gtgggaggag 300
 actcgggacc gattccacct ccttgggggac ccacatacca agaattgcac 350
 cctgagcatc agagatgcc aagaagtga tgcggggaga tacttctttc 400
 gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450
 gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
 cctggagtcc ggctgcccc agaatctgac ctgctctgtg ccctgggcct 550
 gtgagcaggg gacacccct atgatctcct ggatagggac ctccgtgtcc 600
 cccctggacc cctccaccac ccgctcctcg gtgctcacc tcatcccaca 650
 gccccaggac catggcacca gcctcacctg tcaggtgacc ttccctgggg 700
 ccagcgtgac cacgaacaag accgtccatc tcaacgtgtc ctacccgcct 750

cagaacttga ccatgactgt cttccaagga gacggcacag tatccacagt 800
cttgggaaat ggctcatctc tgtoactccc agagggccag tctctgcgcc 850
tggtctgtgc agttgatgca gttgacagca atccccctgc caggctgagc 900
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ggtgctggag ctgccttggg tgcacctgag ggatgcagct gaattcacct 1000
gcagagctca gaaccctctc ggctctcagc aggtctacct gaacgtctcc 1050
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acgggcatag aggatgcaaa cgctgtcagg gggtcagcct ctcaggggcc 1250
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caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
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tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataaact 1550
atgaattatg tgcagagtga aaagcacaca ggcttttagag tcaaagtatc 1600
tcaaacctga atccacactg tgccctccct tttatttttt taactaaaag 1650
acagacaaat tccta 1665

<210> 86
<211> 463
<212> PRT
<213> Homo Sapien

<400> 86
Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala
1 5 10 15
Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr
20 25 30
Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr
35 40 45
Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr
50 55 60
Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala
65 70 75

Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg		80	85	90
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser		95	100	105
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg		110	115	120
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu		125	130	135
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile		140	145	150
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser		155	160	165
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp		170	175	180
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser		185	190	195
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser		200	205	210
Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn		215	220	225
Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr		230	235	240
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly		245	250	255
Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu		260	265	270
Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu		275	280	285
Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser		290	295	300
Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Ala		305	310	315
Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln		320	325	330
Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val		335	340	345
Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe		350	355	360
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys				

	365		370		375
Lys Ser Ala Arg	Pro Ala Ala Gly Val	Gly Asp Thr Gly Ile	Glu		
	380	385	390		
Asp Ala Asn Ala	Val Arg Gly Ser Ala	Ser Gln Gly Pro Leu	Thr		
	395	400	405		
Glu Pro Trp Ala	Glu Asp Ser Pro Pro	Asp Gln Pro Pro Pro	Ala		
	410	415	420		
Ser Ala Arg Ser	Ser Val Gly Glu Gly	Glu Leu Gln Tyr Ala	Ser		
	425	430	435		
Leu Ser Phe Gln	Met Val Lys Pro Trp	Asp Ser Arg Gly Gln	Glu		
	440	445	450		
Ala Thr Asp Thr	Glu Tyr Ser Glu Ile	Lys Ile His Arg			
	455	460			

<210> 87
 <211> 1176
 <212> DNA
 <213> Homo Sapien

<400> 87
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 aggagctctc tgtaccaag gaaagtgcag ctgagactca gacaagatta 100
 caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150
 tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
 gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
 gtgcatttga tggcctgtat tttctccgca ctgagaatgg tgttatctac 300
 cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctgggtggc 350
 cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400
 ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
 tgggccaaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
 ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
 ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
 ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
 gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700
 ggactgacaa cggcccggtg atccctgtgg tctatgattt tggcgacgcc 750
 cagaaaacag catcttatta ctcaccctat ggccagcggg aattcactgc 800

gggatttggt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
 tgtgtgctgg aatgaggggc accggatgta aactgagca tctactgcatt 900
 ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
 ttctggtttt gattggagtg gatatggaac tcatgttggg tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctccca accatgagat cccaaggatg 1100
 gagaacaact taccagtag ctagaatggt aatggcagaa gagaaaacaa 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 88
 Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg
 1 5 10 15
 Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr
 20 25 30
 Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys
 35 40 45
 Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr
 50 55 60
 Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly
 65 70 75
 Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met
 80 85 90
 Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly
 95 100 105
 Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr
 110 115 120
 Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys
 125 130 135
 Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp
 140 145 150
 His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser
 155 160 165
 Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly
 170 175 180

His	Asn	Leu	Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Gly	
				185					190					195	
Glu	Gly	Lys	Cys	Trp	Thr	Asp	Asn	Gly	Pro	Val	Ile	Pro	Val	Val	
				200					205					210	
Tyr	Asp	Phe	Gly	Asp	Ala	Gln	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro	
				215					220					225	
Tyr	Gly	Gln	Arg	Glu	Phe	Thr	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val	
				230					235					240	
Phe	Asn	Asn	Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Met	Arg	
				245					250					255	
Val	Thr	Gly	Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly	
				260					265					270	
Tyr	Phe	Pro	Glu	Ala	Ser	Pro	Gln	Gln	Cys	Gly	Asp	Phe	Ser	Gly	
				275					280					285	
Phe	Asp	Trp	Ser	Gly	Tyr	Gly	Thr	His	Val	Gly	Tyr	Ser	Ser	Ser	
				290					295					300	
Arg	Glu	Ile	Thr	Glu	Ala	Ala	Val	Leu	Leu	Phe	Tyr	Arg			
				305					310						

<210> 89
 <211> 759
 <212> DNA
 <213> Homo Sapien

<400> 89
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 tcagggttg tgccctctcg ctctctgacg ctctggcg atctgggtgt 150
 cgtcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200
 ctctcacgtt ccccccgag gagtatgaca agcaggacat tcagctggtg 250
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 cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350
 gggctcactg tagtgcaccc gtggccctgt ccttcttcat attcgagcgt 400
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 agctgtcact gaaatggctt tattcgtcac cgtctttggg ctgaaaaaga 500
 aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550
 ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcgggtt 600
 ttccctcgg aaactgcttc tgctggagga tatgtgttgg aataattacg 650

tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaaata 700
 tgtttttagtag taacattaag acttatatac agtttttaggg gacaattaa 750
 aaaaaaaaaa 759

<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
 Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu
 1 5 10 15
 Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
 20 25 30
 Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
 95 100 105
 Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
 110 115 120
 Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu
 125 130 135
 Lys Lys Lys Pro Phe
 140

<210> 91
 <211> 1871
 <212> DNA
 <213> Homo Sapien

<400> 91
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 gaagatgcaa ctgactcgct gctgcttcgt gttcctggtg cagggtagcc 100
 tctatctggt catctgtggc caggatgatg gtcctcccgg ctcagaggac 150
 cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcgaa 200
 gcggggccac atctcaccta agtccccgcc catggccaat tccactctcc 250

tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300
cccaaccgcc cgaaccacag cccccacccc tcagccaagg tgaagaaaat 350
ctttggctgg ggcgacttct actccaacat caagacggtg gccctgaacc 400
tgctcgtcac aggggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
cacttccaac acaatgccac agggcaggga aacatctcca tcagcctcgt 500
gccccccagt aaagctgtag agttccacca ggaacagcag atcttcatcg 550
aagccaaggc ctccaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
gaacggggcc gccggacctc gctttgcacc cacgacccag ccaagatctg 650
ctcccagac cacgctcaga gctcagccac ctggagctgc tcccagccct 700
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gtccagaagg tgtgcccaga ttacaactac catagtata cccctacta 800
cccatctggg tgaccggggg caggccacag agggcaggcc agggctggaa 850
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gttgggcctc aggcaggag gggggtggag acgaggagat gccaaagtggg 950
gccagggcca agtctcaagt ggcagagaaa ggggcccaag tgctgggtccc 1000
aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagtg 1050
ggctctctgt gcagcctcac agggctttgc cacggagcca cagagagatg 1100
ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc cccagatcaa 1150
gtcatgggag gaagctaagc ccttggttct tgccatcctg aggaaagata 1200
gcaacaggga gggggagatt tcatcagtgt ggacagcctg tcaacttagg 1250
atggatggct gagagggctt cctaggagcc agtcagcagg gtgggggtggg 1300
gccagaggag ctctccagcc ctgcctagt ggcgcctga gcccttgtc 1350
gtgtgctgag catggcatga ggctgaagt gcaaccctgg ggtctttgat 1400
gtcttgacag attgaccatc tgtctccagc caggccaccc ctttccaaaa 1450
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cccatcctta agctaagaca ggacgattgt ggtcctcca cactaaggcc 1550
acagcccac cgcgtgctgt gtgtccctct tccaccccaa cccctgctgg 1600
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 aataaagctt gccccggggc a 1871

<210> 92
 <211> 252
 <212> PRT
 <213> Homo Sapien

<400> 92
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 Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
 20 25 30
 Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
 35 40 45
 Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
 50 55 60
 Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
 65 70 75
 Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
 80 85 90
 Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
 95 100 105
 Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
 110 115 120
 Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
 125 130 135
 His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
 140 145 150
 Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
 155 160 165
 Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu
 170 175 180
 Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro
 185 190 195
 Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp
 200 205 210
 Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe
 215 220 225

Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr
230 235 240

Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly
245 250

<210> 93
<211> 902
<212> DNA
<213> Homo Sapien

<400> 93
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tatcatcttc ctcacgcgcg gagctttctt ctggttggtg tctctactga 150
tttcgtccct tgtttggttc atggcaagag tcattattga caacaaagat 200
ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250
tatccaagaa atgttccgat ttgcatatta taaactctta aaaaaagcca 300
gtgaaggttt gaagagtata aaccagggtg agacagcacc ctctatgcga 350
ctgctggcct atgtttctgg cttgggcttt ggaatcatga gtggagtatt 400
ttcctttgtg aataccctat ctgactcctt ggggccaggc acagtgggca 450
ttcatggaga ttctcctcaa ttcttccttt attcagcttt catgacgctg 500
gtcattatct tgctgcatgt attctggggc attgtatatt ttgatggctg 550
tgagaagaaa aagtggggca tctccttat cgttctcctg acccacctgc 600
tggtgtcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650
tcagcattta taatcctggt gctcatgggc acctgggcat tcttagctgc 700
gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
actttcttct ttacaaccag cgtccagat aacctcaggg aaccagcact 800
tcccaaaccg cagactacat ctttagagga agcacaactg tgcccttttc 850
tgaaaatccc tttttctggt ggaattgaga aagaaataaa actatgcaga 900
ta 902

<210> 94
<211> 257
<212> PRT
<213> Homo Sapien

<400> 94
Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly
1 5 10 15

Pro	Ala	Leu	Ala	Leu	Tyr	Val	Phe	Thr	Ile	Ala	Ile	Glu	Pro	Leu	
				20					25					30	
Arg	Ile	Ile	Phe	Leu	Ile	Ala	Gly	Ala	Phe	Phe	Trp	Leu	Val	Ser	
				35					40					45	
Leu	Leu	Ile	Ser	Ser	Leu	Val	Trp	Phe	Met	Ala	Arg	Val	Ile	Ile	
				50					55					60	
Asp	Asn	Lys	Asp	Gly	Pro	Thr	Gln	Lys	Tyr	Leu	Leu	Ile	Phe	Gly	
				65					70					75	
Ala	Phe	Val	Ser	Val	Tyr	Ile	Gln	Glu	Met	Phe	Arg	Phe	Ala	Tyr	
				80					85					90	
Tyr	Lys	Leu	Leu	Lys	Lys	Ala	Ser	Glu	Gly	Leu	Lys	Ser	Ile	Asn	
				95					100					105	
Pro	Gly	Glu	Thr	Ala	Pro	Ser	Met	Arg	Leu	Leu	Ala	Tyr	Val	Ser	
				110					115					120	
Gly	Leu	Gly	Phe	Gly	Ile	Met	Ser	Gly	Val	Phe	Ser	Phe	Val	Asn	
				125					130					135	
Thr	Leu	Ser	Asp	Ser	Leu	Gly	Pro	Gly	Thr	Val	Gly	Ile	His	Gly	
				140					145					150	
Asp	Ser	Pro	Gln	Phe	Phe	Leu	Tyr	Ser	Ala	Phe	Met	Thr	Leu	Val	
				155					160					165	
Ile	Ile	Leu	Leu	His	Val	Phe	Trp	Gly	Ile	Val	Phe	Phe	Asp	Gly	
				170					175					180	
Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr	
				185					190					195	
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly	
				200					205					210	
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr	
				215					220					225	
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu	
				230					235					240	
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg	
				245					250					255	

Ser Arg

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

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 gattctactg ttttgtcttc taggatcaac tgggtcatta ccacagctca 150
 aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200
 ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
 accattaaca cagatgctca cactggggcc agatctgcat ctgttaaata 300
 ctgctgcagg aatgacacct ggtaccaga cccacccatt gaccctggga 350
 ggggtgaatg tacaacagca actgcacca catgtgttac caattttgt 400
 cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
 aaatcttcac gagcctcatc atccattcct tgttcccggg aggcattctg 500
 cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttcc 550
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 gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650
 gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatc 700
 agcaaattga attcagtaag ctgtttcaaa ttttttcaac taagctgcct 750
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 gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850
 gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900
 ctttttaaaa caataattca atggataaat ctgtctttga aatataacat 950
 tatgtgcctt ggatgatatg catattaaaa catatttgga aaactggaaa 1000
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
 aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
 Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
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 Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
 20 25 30
 Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Ser Asn
 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu

	50	55	60
Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met			
	65	70	75
Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn			
	80	85	90
Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr			
	95	100	105
Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro			
	110	115	120
Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly			
	125	130	135
Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp			
	140	145	150
Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln			
	155	160	165
Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp			
	170	175	180
Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His			
	185	190	195
Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln			
	200	205	

<210> 97
 <211> 2848
 <212> DNA
 <213> Homo Sapien

<400> 97
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 ttgggcgctg gagggcctgt cctgaccatg gtccctgcct ggctgtggct 150
 gctttgtgtc tccgtcccc aggctctccc caaggcccag cctgcagagc 200
 tgtctgtgga agttccagaa aactatggtg gaaatttccc tttatacctg 250
 accaagttgc cgctgccccg tgaggggggct gaaggccaga tcgtgctgtc 300
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 tccacagcct gtgcttgtgc acgtgaagga tgagaatgac caggtgcccc 500

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ctgcattgag aaattctccg gggaggtgca caccgcccag tccctgcagg 2000
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 agaccatggc ttgatcgtga gtggacccag caaggacccc gatctggcca 2150
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 gccacgaag ctgtcggcag tgggcatcct tgtaggcacc ctggtagcaa 2450
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 aatggcccag gcagctctag ctgggagctt ggccctctggc tccatctgag 2600
 tcccctggga gagagcccag caccgaagat ccagcagggg acaggacaga 2650
 gtagaagccc ctccatctgc cctgggggtgg aggcaccatc accatcacca 2700
 ggcatgtctg cagagcctgg acaccaactt tatggactgc ccatgggagt 2750
 gctccaaatg tcagggtgtt tgcccaataa taaagcccca gagaactggg 2800
 ctgggcccta tgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

<210> 98
 <211> 807
 <212> PRT
 <213> Homo Sapien

<400> 98
 Met Val Pro Ala Trp Leu Trp Leu Leu Cys Val Ser Val Pro Gln
 1 5 10 15
 Ala Leu Pro Lys Ala Gln Pro Ala Glu Leu Ser Val Glu Val Pro
 20 25 30
 Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro
 35 40 45
 Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
 50 55 60
 Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
 65 70 75
 Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala

80										85					90				
Glu	Tyr	Gln	Leu	Gln	Val	Thr	Leu	Glu	Met	Gln	Asp	Gly	His	Val					
				95					100					105					
Leu	Trp	Gly	Pro	Gln	Pro	Val	Leu	Val	His	Val	Lys	Asp	Glu	Asn					
				110					115					120					
Asp	Gln	Val	Pro	His	Phe	Ser	Gln	Ala	Ile	Tyr	Arg	Ala	Arg	Leu					
				125					130					135					
Ser	Arg	Gly	Thr	Arg	Pro	Gly	Ile	Pro	Phe	Leu	Phe	Leu	Glu	Ala					
				140					145					150					
Ser	Asp	Arg	Asp	Glu	Pro	Gly	Thr	Ala	Asn	Ser	Asp	Leu	Arg	Phe					
				155					160					165					
His	Ile	Leu	Ser	Gln	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Asp	Met	Phe					
				170					175					180					
Gln	Leu	Glu	Pro	Arg	Leu	Gly	Ala	Leu	Ala	Leu	Ser	Pro	Lys	Gly					
				185					190					195					
Ser	Thr	Ser	Leu	Asp	His	Ala	Leu	Glu	Arg	Thr	Tyr	Gln	Leu	Leu					
				200					205					210					
Val	Gln	Val	Lys	Asp	Met	Gly	Asp	Gln	Ala	Ser	Gly	His	Gln	Ala					
				215					220					225					
Thr	Ala	Thr	Val	Glu	Val	Ser	Ile	Ile	Glu	Ser	Thr	Trp	Val	Ser					
				230					235					240					
Leu	Glu	Pro	Ile	His	Leu	Ala	Glu	Asn	Leu	Lys	Val	Leu	Tyr	Pro					
				245					250					255					
His	His	Met	Ala	Gln	Val	His	Trp	Ser	Gly	Gly	Asp	Val	His	Tyr					
				260					265					270					
His	Leu	Glu	Ser	His	Pro	Pro	Gly	Pro	Phe	Glu	Val	Asn	Ala	Glu					
				275					280					285					
Gly	Asn	Leu	Tyr	Val	Thr	Arg	Glu	Leu	Asp	Arg	Glu	Ala	Gln	Ala					
				290					295					300					
Glu	Tyr	Leu	Leu	Gln	Val	Arg	Ala	Gln	Asn	Ser	His	Gly	Glu	Asp					
				305					310					315					
Tyr	Ala	Ala	Pro	Leu	Glu	Leu	His	Val	Leu	Val	Met	Asp	Glu	Asn					
				320					325					330					
Asp	Asn	Val	Pro	Ile	Cys	Pro	Pro	Arg	Asp	Pro	Thr	Val	Ser	Ile					
				335					340					345					
Pro	Glu	Leu	Ser	Pro	Pro	Gly	Thr	Glu	Val	Thr	Arg	Leu	Ser	Ala					
				350					355					360					
Glu	Asp	Ala	Asp	Ala	Pro	Gly	Ser	Pro	Asn	Ser	His	Val	Val	Tyr					
				365					370					375					

Gln	Leu	Leu	Ser	Pro	Glu	Pro	Glu	Asp	Gly	Val	Glu	Gly	Arg	Ala	
				380					385					390	
Phe	Gln	Val	Asp	Pro	Thr	Ser	Gly	Ser	Val	Thr	Leu	Gly	Val	Leu	
				395					400					405	
Pro	Leu	Arg	Ala	Gly	Gln	Asn	Ile	Leu	Leu	Leu	Val	Leu	Ala	Met	
				410					415					420	
Asp	Leu	Ala	Gly	Ala	Glu	Gly	Gly	Phe	Ser	Ser	Thr	Cys	Glu	Val	
				425					430					435	
Glu	Val	Ala	Val	Thr	Asp	Ile	Asn	Asp	His	Ala	Pro	Glu	Phe	Ile	
				440					445					450	
Thr	Ser	Gln	Ile	Gly	Pro	Ile	Ser	Leu	Pro	Glu	Asp	Val	Glu	Pro	
				455					460					465	
Gly	Thr	Leu	Val	Ala	Met	Leu	Thr	Ala	Ile	Asp	Ala	Asp	Leu	Glu	
				470					475					480	
Pro	Ala	Phe	Arg	Leu	Met	Asp	Phe	Ala	Ile	Glu	Arg	Gly	Asp	Thr	
				485					490					495	
Glu	Gly	Thr	Phe	Gly	Leu	Asp	Trp	Glu	Pro	Asp	Ser	Gly	His	Val	
				500					505					510	
Arg	Leu	Arg	Leu	Cys	Lys	Asn	Leu	Ser	Tyr	Glu	Ala	Ala	Pro	Ser	
				515					520					525	
His	Glu	Val	Val	Val	Val	Val	Gln	Ser	Val	Ala	Lys	Leu	Val	Gly	
				530					535					540	
Pro	Gly	Pro	Gly	Pro	Gly	Ala	Thr	Ala	Thr	Val	Thr	Val	Leu	Val	
				545					550					555	
Glu	Arg	Val	Met	Pro	Pro	Pro	Lys	Leu	Asp	Gln	Glu	Ser	Tyr	Glu	
				560					565					570	
Ala	Ser	Val	Pro	Ile	Ser	Ala	Pro	Ala	Gly	Ser	Phe	Leu	Leu	Thr	
				575					580					585	
Ile	Gln	Pro	Ser	Asp	Pro	Ile	Ser	Arg	Thr	Leu	Arg	Phe	Ser	Leu	
				590					595					600	
Val	Asn	Asp	Ser	Glu	Gly	Trp	Leu	Cys	Ile	Glu	Lys	Phe	Ser	Gly	
				605					610					615	
Glu	Val	His	Thr	Ala	Gln	Ser	Leu	Gln	Gly	Ala	Gln	Pro	Gly	Asp	
				620					625					630	
Thr	Tyr	Thr	Val	Leu	Val	Glu	Ala	Gln	Asp	Thr	Ala	Leu	Thr	Leu	
				635					640					645	
Ala	Pro	Val	Pro	Ser	Gln	Tyr	Leu	Cys	Thr	Pro	Arg	Gln	Asp	His	
				650					655					660	
Gly	Leu	Ile	Val	Ser	Gly	Pro	Ser	Lys	Asp	Pro	Asp	Leu	Ala	Ser	

	665		670		675
Gly His Gly Pro Tyr Ser Phe Thr Leu Gly Pro Asn Pro Thr Val					
	680		685		690
Gln Arg Asp Trp Arg Leu Gln Thr Leu Asn Gly Ser His Ala Tyr					
	695		700		705
Leu Thr Leu Ala Leu His Trp Val Glu Pro Arg Glu His Ile Ile					
	710		715		720
Pro Val Val Val Ser His Asn Ala Gln Met Trp Gln Leu Leu Val					
	725		730		735
Arg Val Ile Val Cys Arg Cys Asn Val Glu Gly Gln Cys Met Arg					
	740		745		750
Lys Val Gly Arg Met Lys Gly Met Pro Thr Lys Leu Ser Ala Val					
	755		760		765
Gly Ile Leu Val Gly Thr Leu Val Ala Ile Gly Ile Phe Leu Ile					
	770		775		780
Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp					
	785		790		795
Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val					
	800		805		

<210> 99
 <211> 2436
 <212> DNA
 <213> Homo Sapien

<400> 99
 ggctgaccgt gctacattgc ctggaggaag cctaaggaac ccaggcatcc 50
 agctgcccac gcctgagtcc aagattcttc ccaggaacac aaacgtagga 100
 gacccacgct cctggaagca ccagccttta tctcttcacc ttcaagtccc 150
 ctttctcaag aatcctctgt tctttgccct cttaaagtctt ggtacatcta 200
 ggacccaggc atcttgcttt ccagccacaa agagacagat gaagatgcag 250
 aaaggaaatg ttctccttat gtttgggtcta ctattgcatt tagaagctgc 300
 aacaaattcc aatgagacta gcacctctgc caaacttgga tccagtgtga 350
 tctccagtgg agccagcaca gccaccaact ctgggtccag tgtgacctcc 400
 agtgggggtca gcacagccac catctcaggg tccagcgtga cctccaatgg 450
 ggtcagcata gtcaccaact ctgagttcca tacaacctcc agtgggatca 500
 gcacagccac caactctgag ttcagcacag cgtccagtgg gatcagcata 550
 gccaccaact ctgagtccag cacaacctcc agtggggcca gcacagccac 600

caactctgag tccagcacac cctccagtgg ggccagcaca gtcaccaact 650
 ctgggtccag tgtgacctcc agtggagcca gactgccac caactctgag 700
 tccagcacag tgtccagtag ggccagcact gccaccaact ctgagtctag 750
 cacactctcc agtggggcca gcacagccac caactctgac tccagcaca 800
 cctccagtgg ggctagcaca gccaccaact ctgagtccag cacaacctcc 850
 agtggggcca gcacagccac caactctgag tccagcacag tgtccagtag 900
 ggccagcact gccaccaact ctgagtccag cacaacctcc agtggggcca 950
 gcacagccac caactctgag tccagaacga cctccaatgg ggctggcaca 1000
 gccaccaact ctgagtccag cagcactcc agtggggcca gcacagccac 1050
 caactctgac tccagcacag tgtccagtgg ggccagcact gccaccaact 1100
 ctgagtccag cagcactcc agtggggcca gcacagccac caactctgag 1150
 tccagcacga cctccagtgg ggctagcaca gccaccaact ctgactccag 1200
 cacaacctcc agtggggccg gcacagccac caactctgag tccagcacag 1250
 tgtccagtgg gatcagcaca gtcaccaatt ctgagtccag cacacctcc 1300
 agtggggcca acacagccac caactctgag tccagtacga cctccagtgg 1350
 ggccaacaca gccaccaact ctgagtccag cacagtgtcc agtggggcca 1400
 gactgccac caactctgag tccagcaca cctccagtgg ggtcagcaca 1450
 gccaccaact ctgagtccag cacaacctcc agtggggcta gcacagccac 1500
 caactctgac tccagcaca cctccagtga ggccagcaca gccaccaact 1550
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 tccagcaca cctccagtgg ggccaacaca gccaccaact ctgggtccag 1650
 tgtgacctct gcaggctctg gaacagcagc tctgactgga atgcacaca 1700
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 tgagaaacac ctttaacaca gctgtctacc accctcatgg cctcaaccat 1900
 ggcttggtc caggccctgg agggaaatcat ggagcccccc acaggcccag 1950
 gtggagtcct aactggttct ggaggagacc agtatcatcg atagccatgg 2000
 agatgagcgg gaggaacagc gggccctgag cagccccgga agcaagtgcc 2050

gcattcttca ggaaggaaga gacctgggca cccaagacct ggtttctttt 2100
cattcatccc aggagacccc tcccagcttt gtttgagatc ctgaaaatct 2150
tgaagaaggt attcctcacc tttcttgctt ttaccagaca ctggaaagag 2200
aatactatat tgctcattta gctaagaaat aaatacatct catctaacac 2250
acacgacaaa gagaagctgt gcttgccccg ggggtgggtat ctagctctga 2300
gatgaactca gttataggag aaaacctcca tgctggactc catctggcat 2350
tcaaaatctc cacagtaaaa tccaaagacc tcaaaaaaaaa aaaaaaaaaa 2400
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2436

<210> 100
<211> 596
<212> PRT
<213> Homo Sapien

<400> 100
Met Lys Met Gln Lys Gly Asn Val Leu Leu Met Phe Gly Leu Leu
1 5 10 15
Leu His Leu Glu Ala Ala Thr Asn Ser Asn Glu Thr Ser Thr Ser
20 25 30
Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala
35 40 45
Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala
50 55 60
Thr Ile Ser Gly Ser Ser Val Thr Ser Asn Gly Val Ser Ile Val
65 70 75
Thr Asn Ser Glu Phe His Thr Thr Ser Ser Gly Ile Ser Thr Ala
80 85 90
Thr Asn Ser Glu Phe Ser Thr Ala Ser Ser Gly Ile Ser Ile Ala
95 100 105
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
110 115 120
Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Ser Thr Val
125 130 135
Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Ala Ser Thr Ala
140 145 150
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala
155 160 165
Thr Asn Ser Glu Ser Ser Thr Leu Ser Ser Gly Ala Ser Thr Ala
170 175 180

Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	185	190	195
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	200	205	210
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala	215	220	225
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	230	235	240
Thr	Asn	Ser	Glu	Ser	Arg	Thr	Thr	Ser	Asn	Gly	Ala	Gly	Thr	Ala	245	250	255
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	260	265	270
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala	275	280	285
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	290	295	300
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	305	310	315
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Gly	Thr	Ala	320	325	330
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	335	340	345
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Asn	Thr	Ala	350	355	360
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	365	370	375
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala	380	385	390
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala	395	400	405
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	410	415	420
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Glu	Ala	Ser	Thr	Ala	425	430	435
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	440	445	450
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	455	460	465
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ala	Gly	Ser	Gly	Thr	Ala			

470										475					480				
Ala	Leu	Thr	Gly	Met	His	Thr	Thr	Ser	His	Ser	Ala	Ser	Thr	Ala					
				485					490					495					
Val	Ser	Glu	Ala	Lys	Pro	Gly	Gly	Ser	Leu	Val	Pro	Trp	Glu	Ile					
				500					505					510					
Phe	Leu	Ile	Thr	Leu	Val	Ser	Val	Val	Ala	Ala	Val	Gly	Leu	Phe					
				515					520					525					
Ala	Gly	Leu	Phe	Phe	Cys	Val	Arg	Asn	Ser	Leu	Ser	Leu	Arg	Asn					
				530					535					540					
Thr	Phe	Asn	Thr	Ala	Val	Tyr	His	Pro	His	Gly	Leu	Asn	His	Gly					
				545					550					555					
Leu	Gly	Pro	Gly	Pro	Gly	Gly	Asn	His	Gly	Ala	Pro	His	Arg	Pro					
				560					565					570					
Arg	Trp	Ser	Pro	Asn	Trp	Phe	Trp	Arg	Arg	Pro	Val	Ser	Ser	Ile					
				575					580					585					
Ala	Met	Glu	Met	Ser	Gly	Arg	Asn	Ser	Gly	Pro									
				590					595										

<210> 101
 <211> 1728
 <212> DNA
 <213> Homo Sapien

<400> 101
 ggccggacgc ctccgcgtta cgggatgaat taacggcggg ttccgcacgg 50
 aggttggtgac ccctacggag cccagcttg cccacgcacc ccactcggcg 100
 tcgcgcggcg tgccctgctt gtcacaggtg ggaggttgga actatcaggc 150
 tgaaaaacag agtgggtact ctcttctggg aagctggcaa caaatggatg 200
 atgtgatata tgcattccag gggaaaggaa attgtggtgc ttctgaaccc 250
 atggtcaatt aacgaggcag tttctagcta ctgcacgtac ttcataaagc 300
 aggactctaa aagctttgga atcatggtgt catggaaagg gatttacttt 350
 atactgactc tgttttgggg aagctttttt ggaagcattt tcatgctgag 400
 tcccttttta cctttgatgt ttgtaaaccc atcttggtat cgctggatca 450
 acaaccgcct tgtggcaaca tggctcacc tacctgtggc attattggag 500
 accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttcctgg 550
 agaaagaagt gtcattatca tgaaccatcg gacaagaatg gactggatgt 600
 tcctgtggaa ttgcctgatg cgatatagct acctcagatt ggagaaaatt 650

tgctcaaag cgagtctcaa aggtgttcct ggatttggtt gggccatgca 700
 ggctgctgcc tatactttca ttcataaggaa atggaaggat gacaagagcc 750
 atttcgaaga catgattgat tacttttgtg atattcacga accacttcaa 800
 ctctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850
 aagtaatgca tttgctgaaa aaaatggact tcagaaatat gaatatgttt 900
 tacatccaag aactacaggc tttacttttg tggtagaccg tctaagagaa 950
 ggtaagaacc ttgatgctgt ccatgatatc actgtggcgt atcctcacia 1000
 cattcctcaa tcagagaagc acctcctcca aggagacttt cccagggaaa 1050
 tccactttca cgtccaccgg tatccaatag acaccctccc cacatccaag 1100
 gaggaccttc aactctggtg ccacaaacgg tgggaagaga aagaagagag 1150
 gctgcgttcc ttctatcaag gggagaagaa tttttatttt accggacaga 1200
 gtgtcattcc accttgcaag tctgaactca gggtccttgt ggtcaaattg 1250
 ctctctatac tgtattggac cctgttcagc cctgcaatgt gcctactcat 1300
 atatttgtac agtcttggtt agtgggtatt tataatcacc attgtaatct 1350
 ttgtgctgca agagagaata tttggtggac tggagatcat agaacttgca 1400
 tgttaccgac ttttacacia acagccacat ttaaattcaa agaaaaatga 1450
 gtaagattat aaggtttgcc atgtgaaaac ctagagcata ttttggaat 1500
 gttctaaacc tttctaagct cagatgcatt tttgcatgac tatgtcgaat 1550
 atttcttact gccatcatta tttgttaaag atattttgca cttaattttg 1600
 tgggaaaaat attgctacia ttttttttaa tctctgaatg taatttcgat 1650
 actgtgtaca tagcaggag tgatcggggt gaaataactt gggccagaat 1700
 attattaaac aatcatcagg ctttttaa 1728

<210> 102
 <211> 414
 <212> PRT
 <213> Homo Sapien

<400> 102
 Met His Ser Arg Gly Arg Glu Ile Val Val Leu Leu Asn Pro Trp
 1 5 10 15
 Ser Ile Asn Glu Ala Val Ser Ser Tyr Cys Thr Tyr Phe Ile Lys
 20 25 30
 Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile
 35 40 45

Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile	
				50					55					60	
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser	
				65					70					75	
Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr	
				80					85					90	
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile	
				95					100					105	
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile	
				110					115					120	
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys	
				125					130					135	
Leu	Met	Arg	Tyr	Ser	Tyr	Leu	Arg	Leu	Glu	Lys	Ile	Cys	Leu	Lys	
				140					145					150	
Ala	Ser	Leu	Lys	Gly	Val	Pro	Gly	Phe	Gly	Trp	Ala	Met	Gln	Ala	
				155					160					165	
Ala	Ala	Tyr	Ile	Phe	Ile	His	Arg	Lys	Trp	Lys	Asp	Asp	Lys	Ser	
				170					175					180	
His	Phe	Glu	Asp	Met	Ile	Asp	Tyr	Phe	Cys	Asp	Ile	His	Glu	Pro	
				185					190					195	
Leu	Gln	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Asp	Leu	Thr	Glu	Asn	
				200					205					210	
Ser	Lys	Ser	Arg	Ser	Asn	Ala	Phe	Ala	Glu	Lys	Asn	Gly	Leu	Gln	
				215					220					225	
Lys	Tyr	Glu	Tyr	Val	Leu	His	Pro	Arg	Thr	Thr	Gly	Phe	Thr	Phe	
				230					235					240	
Val	Val	Asp	Arg	Leu	Arg	Glu	Gly	Lys	Asn	Leu	Asp	Ala	Val	His	
				245					250					255	
Asp	Ile	Thr	Val	Ala	Tyr	Pro	His	Asn	Ile	Pro	Gln	Ser	Glu	Lys	
				260					265					270	
His	Leu	Leu	Gln	Gly	Asp	Phe	Pro	Arg	Glu	Ile	His	Phe	His	Val	
				275					280					285	
His	Arg	Tyr	Pro	Ile	Asp	Thr	Leu	Pro	Thr	Ser	Lys	Glu	Asp	Leu	
				290					295					300	
Gln	Leu	Trp	Cys	His	Lys	Arg	Trp	Glu	Glu	Lys	Glu	Glu	Arg	Leu	
				305					310					315	
Arg	Ser	Phe	Tyr	Gln	Gly	Glu	Lys	Asn	Phe	Tyr	Phe	Thr	Gly	Gln	
				320					325					330	
Ser	Val	Ile	Pro	Pro	Cys	Lys	Ser	Glu	Leu	Arg	Val	Leu	Val	Val	

	335		340		345									
Lys	Leu	Leu	Ser	Ile	Leu	Tyr	Trp	Thr	Leu	Phe	Ser	Pro	Ala	Met
				350					355					360
Cys	Leu	Leu	Ile	Tyr	Leu	Tyr	Ser	Leu	Val	Lys	Trp	Tyr	Phe	Ile
				365					370					375
Ile	Thr	Ile	Val	Ile	Phe	Val	Leu	Gln	Glu	Arg	Ile	Phe	Gly	Gly
				380					385					390
Leu	Glu	Ile	Ile	Glu	Leu	Ala	Cys	Tyr	Arg	Leu	Leu	His	Lys	Gln
				395					400					405
Pro	His	Leu	Asn	Ser	Lys	Lys	Asn	Glu						
				410										

<210> 103
 <211> 2403
 <212> DNA
 <213> Homo Sapien

<400> 103
 cggctcgagc ggctcgagtg aagagcctct ccacggctcc tgcgcctgag 50
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 ttcattagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150
 tttggttctc agtttctacg agctggtgctc aggacagtgg caagtcactg 200
 gaccgggcaa gtttgtccag gccttggtgg gggaggacgc cgtgttctcc 250
 tgctccctct ttcctgagac cagtgcagag gctatggaag tgcggttctt 300
 caggaatcag ttccatgctg tgggtccacct ctacagagat ggggaagact 350
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aaa 2403

<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

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Ser	Gly	Gln	Trp	Gln	Val	Thr	Gly	Pro	Gly	Lys	Phe	Val	Gln	Ala
				20					25					30
Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu
				35					40					45
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe
				50					55					60
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser
				65					70					75
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp
				80					85					90
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr
				95					100					105
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile
				110					115					120
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly
				125					130					135
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile
				140					145					150
Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg
				170					175					180
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile
				185					190					195
Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu
				200					205					210
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu
				215					220					225
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu
				230					235					240

Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile
				245					250					255
Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro
				305					310					315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val
				320					325					330
Val	Ala	Ser	Gln	Gly	Phe	Gln	Ala	Gly	Arg	His	Tyr	Trp	Glu	Val
				335					340					345
Asp	Val	Gly	Gln	Asn	Val	Gly	Trp	Tyr	Val	Gly	Val	Cys	Arg	Asp
				350					355					360
Asp	Val	Asp	Arg	Gly	Lys	Asn	Asn	Val	Thr	Leu	Ser	Pro	Asn	Asn
				365					370					375
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Thr	Thr	Glu	His	Leu	Tyr	Phe	Thr
				380					385					390
Phe	Asn	Pro	His	Phe	Ile	Ser	Leu	Pro	Pro	Ser	Thr	Pro	Pro	Thr
				395					400					405
Arg	Val	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Gly	Gly	Thr	Ile	Ser	Phe
				410					415					420
Phe	Asn	Thr	Asn	Asp	Gln	Ser	Leu	Ile	Tyr	Thr	Leu	Leu	Thr	Cys
				425					430					435
Gln	Phe	Glu	Gly	Leu	Leu	Arg	Pro	Tyr	Ile	Gln	His	Ala	Met	Tyr
				440					445					450
Asp	Glu	Glu	Lys	Gly	Thr	Pro	Ile	Phe	Ile	Cys	Pro	Val	Ser	Trp
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<210> 105

<211> 2103

<212> DNA

<213> Homo Sapien

<400> 105

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<210> 106

<211> 423

<212> PRT

<213> Homo Sapien

<400> 106

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				20					25					30
Val	Leu	Ala	Val	Cys	Ile	Gly	Leu	Thr	Val	His	Tyr	Val	Arg	Tyr
				35					40					45
Asn	Gln	Lys	Lys	Thr	Tyr	Asn	Tyr	Tyr	Ser	Thr	Leu	Ser	Phe	Thr
				50					55					60
Thr	Asp	Lys	Leu	Tyr	Ala	Glu	Phe	Gly	Arg	Glu	Ala	Ser	Asn	Asn
				65					70					75
Phe	Thr	Glu	Met	Ser	Gln	Arg	Leu	Glu	Ser	Met	Val	Lys	Asn	Ala
				80					85					90
Phe	Tyr	Lys	Ser	Pro	Leu	Arg	Glu	Glu	Phe	Val	Lys	Ser	Gln	Val
				95					100					105
Ile	Lys	Phe	Ser	Gln	Gln	Lys	His	Gly	Val	Leu	Ala	His	Met	Leu
				110					115					120
Leu	Ile	Cys	Arg	Phe	His	Ser	Thr	Glu	Asp	Pro	Glu	Thr	Val	Asp
				125					130					135
Lys	Ile	Val	Gln	Leu	Val	Leu	His	Glu	Lys	Leu	Gln	Asp	Ala	Val

	140		145		150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile	155		160		165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr	170		175		180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly	185		190		195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln	200		205		210
Trp Asp Gly Ser His Arg Cys Gly Ala Thr Leu Ile Asn Ala Thr	215		220		225
Trp Leu Val Ser Ala Ala His Cys Phe Thr Thr Tyr Lys Asn Pro	230		235		240
Ala Arg Trp Thr Ala Ser Phe Gly Val Thr Ile Lys Pro Ser Lys	245		250		255
Met Lys Arg Gly Leu Arg Arg Ile Ile Val His Glu Lys Tyr Lys	260		265		270
His Pro Ser His Asp Tyr Asp Ile Ser Leu Ala Glu Leu Ser Ser	275		280		285
Pro Val Pro Tyr Thr Asn Ala Val His Arg Val Cys Leu Pro Asp	290		295		300
Ala Ser Tyr Glu Phe Gln Pro Gly Asp Val Met Phe Val Thr Gly	305		310		315
Phe Gly Ala Leu Lys Asn Asp Gly Tyr Ser Gln Asn His Leu Arg	320		325		330
Gln Ala Gln Val Thr Leu Ile Asp Ala Thr Thr Cys Asn Glu Pro	335		340		345
Gln Ala Tyr Asn Asp Ala Ile Thr Pro Arg Met Leu Cys Ala Gly	350		355		360
Ser Leu Glu Gly Lys Thr Asp Ala Cys Gln Gly Asp Ser Gly Gly	365		370		375
Pro Leu Val Ser Ser Asp Ala Arg Asp Ile Trp Tyr Leu Ala Gly	380		385		390
Ile Val Ser Trp Gly Asp Glu Cys Ala Lys Pro Asn Lys Pro Gly	395		400		405
Val Tyr Thr Arg Val Thr Ala Leu Arg Asp Trp Ile Thr Ser Lys	410		415		420
Thr Gly Ile					

<210> 107
<211> 2397
<212> DNA
<213> Homo Sapien

<400> 107
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<210> 108
 <211> 305
 <212> PRT
 <213> Homo Sapien

<400> 108
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 Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
 35 40 45

Thr	Ala	Glu	Thr	Arg	Val	Glu	Glu	Ala	Val	Ile	Leu	Thr	Tyr	Phe	
				50					55					60	
Pro	Val	Val	His	Pro	Val	Met	Ile	Ala	Val	Cys	Cys	Phe	Leu	Ile	
				65					70					75	
Ile	Val	Gly	Met	Leu	Gly	Tyr	Cys	Gly	Thr	Val	Lys	Arg	Asn	Leu	
				80					85					90	
Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
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<210> 109
 <211> 2339
 <212> DNA
 <213> Homo Sapien

<400> 109

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gcctgggtgct gtctgaggat aaccacactt gccaaagtcct tgtgttgtgc 1000
aaatcaaagt ccattgaagt gaacatcccc agggagctgg ttggtggcct 1050
ggagctcttc ctgaccaaca cctcctgccg aggagtgtcc aacggcacc 1100
atgtcaacat cctcttctct ctcaagacat gtggtacagt ggtcgatgtg 1150
gtgaatgaca agattgtggc cagcaacctc gtgacaggtc tacccaagca 1200
gaccccgggg agcagcgggg acttcatcat ccgaaccagc aagctgctga 1250
tcccggtgac ctgcgagttt ccacgcctgt acaccatttc tgaaggatac 1300
gttcccaacc ttcgaaactc cccactggaa atcatgagcc gaaatcatgg 1350
gatcttccca ttcaactctg agatcttcaa ggacaatgag tttgaagagc 1400
cttaccggga agctctgccc accctcaagc ttcgtgactc cctctacttt 1450

ggcattgagc ccgtggtgca cgtgagcggc ttggaaagct tgggtggagag 1500
 ctgcttttggc acccccacct ccaagatcga cgaggtcctg aaatactacc 1550
 tcatccggga tggctgtgtt tcagatgact cggtaaagca gtacacatcc 1600
 cgggatcacc tagcaaagca cttccaggtc cctgtcttca agtttgtggg 1650
 caaagaccac aaggaagtgt ttctgcactg ccgggttctt gtctgtggag 1700
 tgttggacga gcgttccccg tgtgcccagg gttgccaccg gcgaatgcgt 1750
 cgtggggcag gaggagagga ctacagccgt ctacagggcc agacgctaac 1800
 aggcggcccc atccgcacgc actgggagga ctagttcgta gccatacctc 1850
 gagtccctgc attggacggc tctgctcttt ggagcttctc cccccaccgc 1900
 cctctaagaa catctgcca cagctgggtt cagacttcac actgtgagtt 1950
 cagactccca gcaccaactc actctgattc tgggccattc agtgggcaca 2000
 ggtcacagca ctgctgaaca atgtggcctg ggtgggggtt catctttcta 2050
 gggttgaaaa ctaaactgtc caccagaaa gacactcacc ccatttccct 2100
 catttcttct ctacacttaa atacctcgtg tatggtgcaa tcagaccaca 2150
 aaatcagaag ctgggtataa tatttcaagt taaaaacct agaaaaatta 2200
 aacagttact gaaattatga cttaaatacc caatgactcc ttaaataatgt 2250
 aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
 ggaatttgga agtgatcaa taaaacagta tataatttt 2339

<210> 110
 <211> 545
 <212> PRT
 <213> Homo Sapien

<400> 110
 Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr
 1 5 10 15
 Ser Val Ser Pro Val Ala Leu Asp Pro Cys Ser Ala Tyr Ile Ser
 20 25 30
 Leu Asn Glu Pro Trp Arg Asn Thr Asp His Gln Leu Asp Glu Ser
 35 40 45
 Gln Gly Pro Pro Leu Cys Asp Asn His Val Asn Gly Glu Trp Tyr
 50 55 60
 His Phe Thr Gly Met Ala Gly Asp Ala Met Pro Thr Phe Cys Ile
 65 70 75
 Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp Leu Asn Gly

80										85					90				
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys					
				95					100					105					
Ala	Ser	Phe	Asn	Gly	Asn	Cys	Cys	Leu	Trp	Asn	Thr	Thr	Val	Glu					
				110					115					120					
Val	Lys	Ala	Cys	Pro	Gly	Gly	Tyr	Tyr	Val	Tyr	Arg	Leu	Thr	Lys					
				125					130					135					
Pro	Ser	Val	Cys	Phe	His	Val	Tyr	Cys	Gly	His	Phe	Tyr	Asp	Ile					
				140					145					150					
Cys	Asp	Glu	Asp	Cys	His	Gly	Ser	Cys	Ser	Asp	Thr	Ser	Glu	Cys					
				155					160					165					
Thr	Cys	Ala	Pro	Gly	Thr	Val	Leu	Gly	Pro	Asp	Arg	Gln	Thr	Cys					
				170					175					180					
Phe	Asp	Glu	Asn	Glu	Cys	Glu	Gln	Asn	Asn	Gly	Gly	Cys	Ser	Glu					
				185					190					195					
Ile	Cys	Val	Asn	Leu	Lys	Asn	Ser	Tyr	Arg	Cys	Glu	Cys	Gly	Val					
				200					205					210					
Gly	Arg	Val	Leu	Arg	Ser	Asp	Gly	Lys	Thr	Cys	Glu	Asp	Val	Glu					
				215					220					225					
Gly	Cys	His	Asn	Asn	Asn	Gly	Gly	Cys	Ser	His	Ser	Cys	Leu	Gly					
				230					235					240					
Ser	Glu	Lys	Gly	Tyr	Gln	Cys	Glu	Cys	Pro	Arg	Gly	Leu	Val	Leu					
				245					250					255					
Ser	Glu	Asp	Asn	His	Thr	Cys	Gln	Val	Pro	Val	Leu	Cys	Lys	Ser					
				260					265					270					
Asn	Ala	Ile	Glu	Val	Asn	Ile	Pro	Arg	Glu	Leu	Val	Gly	Gly	Leu					
				275					280					285					
Glu	Leu	Phe	Leu	Thr	Asn	Thr	Ser	Cys	Arg	Gly	Val	Ser	Asn	Gly					
				290					295					300					
Thr	His	Val	Asn	Ile	Leu	Phe	Ser	Leu	Lys	Thr	Cys	Gly	Thr	Val					
				305					310					315					
Val	Asp	Val	Val	Asn	Asp	Lys	Ile	Val	Ala	Ser	Asn	Leu	Val	Thr					
				320					325					330					
Gly	Leu	Pro	Lys	Gln	Thr	Pro	Gly	Ser	Ser	Gly	Asp	Phe	Ile	Ile					
				335					340					345					
Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Val	Thr	Cys	Glu	Phe	Pro	Arg					
				350					355					360					
Leu	Tyr	Thr	Ile	Ser	Glu	Gly	Tyr	Val	Pro	Asn	Leu	Arg	Asn	Ser					
				365					370					375					

Pro	Leu	Glu	Ile	Met	Ser	Arg	Asn	His	Gly	Ile	Phe	Pro	Phe	Thr	380	385	390
Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu	395	400	405
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile	410	415	420
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser	425	430	435
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr	440	445	450
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln	455	460	465
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val	470	475	480
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys	485	490	495
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala	500	505	510
Gln	Gly	Cys	His	Arg	Arg	Met	Arg	Arg	Gly	Ala	Gly	Gly	Glu	Asp	515	520	525
Ser	Ala	Gly	Leu	Gln	Gly	Gln	Thr	Leu	Thr	Gly	Gly	Pro	Ile	Arg	530	535	540
Ile	Asp	Trp	Glu	Asp											545		

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
 gagagaggca gcagcttgct cagcggacaa ggatgctggg cgtgagggac 50
 caaggcctgc cctgcactcg ggcctcctcc agccagtgtc gaccagggac 100
 ttctgacctg ctggccagcc aggacctgtg tggggaggcc ctctgtctgc 150
 cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200
 agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
 cgatgtcaaaa cccctgcgca aaccccgatat ccccatggag accttcagaa 300
 aggtgggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
 attgtggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400

cgggcagcct ctccacttca tcccaggaa gcagctgtgt gacggagagc 450
 tggactgtcc cttgggggag gacgaggagc actgtgtcaa gagcttcccc 500
 gaagggcctg cagtggcagt cgcctctcc aaggaccgat ccacactgca 550
 ggtgctggac tcggccacag ggaactggtt ctctgctgtt ttcgacaact 600
 tcacagaagc tctcgtgag acagcctgta ggcagatggg ctacagcaga 650
 gctgtggaga ttggcccaga ccaggatctg gatgttggtg aaatcacaga 700
 aaacagccag gagcttcgca tgcggaactc aagtgggccc tgtctctcag 750
 gctccctggt ctccctgcac tgtcttgctt gtgggaagag cctgaagacc 800
 ccccggtgtg tgggtgggga ggaggcctct gtggattctt ggcttgga 850
 ggtcagcatc cagtacgaca aacagcacgt ctgtggaggg agcatcctgg 900
 acccccactg ggtcctcacg gcagcccact gcttcaggaa acataccgat 950
 gtgttcaact ggaaggtgcg ggcaggctca gacaaactgg gcagcttccc 1000
 atccctggct gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050
 ccaaagacaa tgacatcgcc ctcatgaagc tgcagttccc actcacttcc 1100
 tcaggcacag tcaggcccat ctgtctgccc ttctttgatg aggagctcac 1150
 tccagccacc ccactctgga tcattggatg gggctttacg aagcagaatg 1200
 gagggaagat gtctgacata ctgctgcagg cgtcagtcca ggtcattgac 1250
 agcacacggt gcaatgcaga cgatgcgtac cagggggaag tcaccgagaa 1300
 gatgatgtgt gcaggcatcc cggaaggggg tgtggacacc tgccaggggtg 1350
 acagtgggtg gcccctgatg taccaatctg accagtggca tgtgggtgggc 1400
 atcgttagct ggggctatgg ctgcgggggc ccgagcacc caggagtata 1450
 caccaaggtc tcagcctatc tcaactggat ctacaatgtc tggaaggctg 1500
 agctgtaatg ctgctgcccc ttgagcgtgc tgggagccgc ttccttctg 1550
 ccctgcccac ctggggatcc cccaaagtca gacacagagc aagagtcccc 1600
 ttgggtacac ccctctgccc acagcctcag catttcttgg agcagcaaag 1650
 ggcctcaatt cctgtaagag accctcgcag ccagagggcg ccagaggaa 1700
 gtcagcagcc ctagctcggc cacacttggg gctcccagca tcccaggag 1750
 agacacagcc cactgaacaa ggtctcaggg gtattgctaa gccaaagagg 1800
 aactttccca cactactgaa tggaagcagg ctgtcttgta aaagcccaga 1850

tcactgtggg ctggagagga gaaggaaagg gtctgcgcca gccctgtccg 1900
tcttcaccca tccccaagcc tactagagca agaaaccagt tgtaatataa 1950
aatgcactgc cctactgttg gtatgactac cgttacctac tgttgtcatt 2000
gttattacag ctatggccac tattattaaa gagctgtgta acatctctgg 2050
caaaaaaaaaaaa aaa 2063

<210> 112
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112
Met Leu Gln Asp Pro Asp Ser Asp Gln Pro Leu Asn Ser Leu Asp
1 5 10 15
Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg
20 25 30
Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45
Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr
50 55 60
Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln
65 70 75
Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu
80 85 90
His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg
95 100 105
Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr
110 115 120
Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu
125 130 135
Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu
140 145 150
Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn
155 160 165
Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser
170 175 180
Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu
185 190 195
Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser
200 205 210

Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	
				215					220					225	
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	
				230					235					240	
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	
				245					250					255	
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	
				260					265					270	
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	
				275					280					285	
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	
				290					295					300	
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	
				305					310					315	
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	
				320					325					330	
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	
				335					340					345	
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu	
				350					355					360	
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val	
				365					370					375	
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser	
				380					385					390	
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys	
				395					400					405	
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr	
				410					415					420	
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu				
				425					430						

<210> 113
 <211> 1768
 <212> DNA
 <213> Homo Sapien

<400> 113
 ggctggactg gaactcctgg tcccaagtga tccacccgcc tcagcctccc 50
 aaggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100
 tttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150
 tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200

tttgttctct tgtaactagc ctttaccttc ctaacacaga ggatctgtca 250
 ctgtggctct ggcccaaacc tgaccttcac tctggaacga gaacagaggt 300
 ttctaccac accgtccct cgaagccggg gacagcctca ccttgctggc 350
 ctctcgctgg agcagtggcc tcaccaactg tctcacgtct ggaggcactg 400
 actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450
 tgggccttgc cctggccgta gaagggattg acaagcccga agatttcata 500
 ggcgatggct cccactggcc aggcacagc cttgctgtag tcaatcactg 550
 ccctggggcc aggacgggcc gtggacacct gctcagaagc agtgggtgag 600
 acatcacgct gcccgcccat ctaacctttt catgtcctgc acatcacctg 650
 atccatgggc taatctgaac tctgtcccaa ggaaccaga gcttgagtga 700
 gctgtggctc agaccagaa ggggtctgct tagaccacct ggtttatgtg 750
 acaggacttg cattctctg gaacatgagg gaacgccga ggaaagcaaa 800
 gtggcaggga aggaacttgt gccaaattat gggtcagaaa agatggaggt 850
 gttgggttat cacaaggcat cgagtctctt gcattcagtg gacatgtggg 900
 ggaagggctg ccgatggcgc atgacacact cgggactcac ctctggggcc 950
 atcagacagc cgtttccgcc ccgatccacg taccagctgc tgaagggcaa 1000
 ctgcaggccg atgctctcat cagccaggca gcagccaaaa tctgcatca 1050
 ccagccaggg gcagccgtct gggaaggagc aagcaaagt accatttctc 1100
 ctccccctct tccctctgag aggcctcct atgtccctac taaagccacc 1150
 agcaagacat agctgacagg ggctaattggc tcagtgttgg ccaggaggt 1200
 cagcaaggcc tgagagctga tcagaagggc ctgctgtgcg aacacggaaa 1250
 tgccctcagt aagcacaggc tgcaaatcc ccaggcaaag gactgtgtgg 1300
 ctcaatttaa atcatgttct agtaattgga gctgtccca agaccaaagg 1350
 agctagagct tggttcaa at gatctccaag ggcccttata cccaggaga 1400
 ctttgatttg aatttgaaac cccaaatcca aacctaaaga ccagggtgat 1450
 taagaatcag ttattgccgg gtgtgggtggc ctgtaatgcc aacattttgg 1500
 gaggccgagg cgggtagatc acctgaggtc aggagttcaa gaccagctg 1550
 gccaacatgg tgaaaccct gtctctacta aaaatacaaa aaaactagcc 1600
 aggcattggt gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650

gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
 ttcagcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750
 aattatggtt atttgtaa 1768

<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
 Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser
 1 5 10 15
 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 115
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 115
 cagcagtggg ctctcagtcc tctcaaagca aggaaagagt actgtgtgct 50
 gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
 ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
 ttgtggactg gtgtttggta tcttggccct aactctaatt gtctgtttt 200
 gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
 gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaaat ggcactgatg 350
 aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400

gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
 attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
 aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
 gaccatgtat tggatcaatc ccactcta atcagtttct gagttacaag 650
 actttgagga ggaggagaa gatcttcact ttcttgccaa cgaaaaaaaa 700
 gggattgaac aaaatgaaca gtgggtggtc cctcaagtga aagtagagaa 750
 gacccgtcac gccagacaag caagtgagga agaacttcca ataaatgact 800
 atactgaaaa tggaatagaa tttgatccca tgctggatga gagagggtat 850
 tgttgatatt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
 acctttacta ggctactacc catatccata ctgctaccaa ggaggacgag 950
 tcatctgtcg tgtcatcatg ccttgtaact ggtgggtggc ccgcatgctg 1000
 gggagggtct aataggaggt ttgagctcaa atgcttaa ac tgctggcaac 1050
 atataataaa tgcattgctat tcaatgaatt tctgcctatg aggcattctg 1100
 cccctggtag ccagctctcc agaattactt gtaggtaatt cctctcttca 1150
 tgttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaa 1197

<210> 116
 <211> 317
 <212> PRT
 <213> Homo Sapien

<400> 116
 Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
 1 5 10 15
 Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
 20 25 30
 Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
 35 40 45
 Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys
 50 55 60
 Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys
 65 70 75
 Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe
 80 85 90
 Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe
 95 100 105

Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys	
				110					115					120	
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro	
				125					130					135	
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe	
				140					145					150	
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn	
				155					160					165	
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn	
				170					175					180	
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu	
				185					190					195	
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala	
				200					205					210	
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro	
				215					220					225	
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu	
				230					235					240	
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe	
				245					250					255	
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg	
				260					265					270	
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly	
				275					280					285	
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys	
				290					295					300	
Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly	
				305					310					315	

Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

gagctcccct caggagcgcg ttagcttcac accttcggca gcaggagggc 50

ggcagcttct cgcaggcggc agggcgggcg gccaggatca tgtccaccac 100

cacatgccaa gtggtggcgt tctctctgtc catctggtgg ctggccggct 150

gcacgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac 200

aacccccgtca cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt 250
gaggcagagt tcaggcttca ccgaatgcag gccctatttc accatcctgg 300
gacttccagc catgctgcag gcagtgcgag ccctgatgat cgtaggcatc 350
gtcctgggtg ccattggcct cctggatatcc atctttgccc tgaaatgcat 400
ccgcattggc agcatggagg actctgcaa agccaacatg aactgacct 450
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gtacaccggc atgggtggga tgggtgcagac tgttcagacc aggtacacat 600
ttgggtcggc tctgttcgtg ggctgggtcg ctggaggcct cacactaatt 650
gggggtgtga tgatgtgcat cgctgcccgg ggctggcac cagaagaaac 700
caactacaaa gccgtttctt atcatgcctc aggccacagt gttgcctaca 750
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aagaagatat acgatggagg tgcccgaca gaggacgagg tacaatctta 850
tccttccaag cagactatg tgtaatgctc taagacctct cagcacgggc 900
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tatccccaag aaaacttttg aaaggaaaga gtagaccaa agatgttatt 1300
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cacttactga agaagaagca ataagagaaa gatatttgta atctctccag 1400
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tcttattaca gcaacacat tctaggagtt tctgagctc tccactggag 1550
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gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
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aggttaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met	Ser	Thr	Thr	Thr	Cys	Gln	Val	Val	Ala	Phe	Leu	Leu	Ser	Ile
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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120
Ser	Gly	Ile	Met	Phe	Ile	Val	Ser	Gly	Leu	Cys	Ala	Ile	Ala	Gly
				125					130					135
Val	Ser	Val	Phe	Ala	Asn	Met	Leu	Val	Thr	Asn	Phe	Trp	Met	Ser
				140					145					150
Thr	Ala	Asn	Met	Tyr	Thr	Gly	Met	Gly	Gly	Met	Val	Gln	Thr	Val
				155					160					165

Gln	Thr	Arg	Tyr	Thr	Phe	Gly	Ala	Ala	Leu	Phe	Val	Gly	Trp	Val
				170					175					180
Ala	Gly	Gly	Leu	Thr	Leu	Ile	Gly	Gly	Val	Met	Met	Cys	Ile	Ala
				185					190					195
Cys	Arg	Gly	Leu	Ala	Pro	Glu	Glu	Thr	Asn	Tyr	Lys	Ala	Val	Ser
				200					205					210
Tyr	His	Ala	Ser	Gly	His	Ser	Val	Ala	Tyr	Lys	Pro	Gly	Gly	Phe
				215					220					225
Lys	Ala	Ser	Thr	Gly	Phe	Gly	Ser	Asn	Thr	Lys	Asn	Lys	Lys	Ile
				230					235					240
Tyr	Asp	Gly	Gly	Ala	Arg	Thr	Glu	Asp	Glu	Val	Gln	Ser	Tyr	Pro
				245					250					255
Ser	Lys	His	Asp	Tyr	Val									
				260										

<210> 119
 <211> 2010
 <212> DNA
 <213> Homo Sapien

<400> 119
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 caacccatgc cttagaaatc gctgggctgt ttcttggtgg tggtggaatg 150
 gtgggcacag tggtgtcac tgtcatgctt cagtggagag tgtcggcctt 200
 cattgaaaac aacatcgtgg tttttgaaa cttctgggaa ggactgtgga 250
 tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300
 tccctgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
 tgctgcttcc gtgatgtcct tcttggttt catgatggcc atccttgga 400
 tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
 ctgctgacgg ctggaatcat cttcatcatc acgggcatgg tgggtgctcat 500
 ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550
 tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
 tggaccacgg cactggtgct gattgttgga ggagctctgt tctgctgcgt 650
 tttttgttgc aacgaaaaga gcagtagcta cagatactcg ataccttccc 700
 atcgcacaac ccaaaaaagt tatcacaccg gaaagaagtc accgagcgtc 750
 tactccagaa gtcagtatgt gtagttgtgt atgttttttt aactttacta 800

taaagccatg caaatgacaa aaatctatat tacttttctca aaatggaccc 850
 caaagaaaact ttgattttact gttctttaact gcctaactctt aattacagga 900
 actgtgcatc agctatttat gattctataa gctattttcag cagaatgaga 950
 tattaaaaccc aatgctttga ttgttctaga aagtatagta atttgttttc 1000
 taagggtggtt caagcatcta ctctttttat catttacttc aaaatgacat 1050
 tgctaaagac tgcattattt tactactgta atttctccac gacatagcat 1100
 tatgtacata gatgagtgtg acattttatat ctcacataga gacatgctta 1150
 tatgggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200
 actcaactat tgctttttcag ggaaatcatg gatagggttg aagaagggtta 1250
 ctattaattg tttaaaaaca gcttagggat taatgtcctc catttataat 1300
 gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350
 tttctgatat gctgtttttt agcctaggag ttagaaatcc taacttcttt 1400
 atcctcttct cccagaggct ttttttttct tgtgtattaa attaacattt 1450
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 agggctatac tcagaagaaa gataaaagtg tgatctaaga aaaagtgatg 1550
 gttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600
 gcattttgac aagaaatcat atatgtatgg atatatttta ataagtattt 1650
 gagtacagac tttgagggtt catcaatata aataaaagag cagaaaaata 1700
 tgtcttggtt ttcatttgct taccaaaaaa acaacaacaa aaaaagttgt 1750
 cctttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800
 atttttgttc tgtgaaaaat aaatttcctt cttgtaccat ttctgtttag 1850
 ttttactaaa atctgtaa atctgtatttt tctgtttatt ccaaatttga 1900
 tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950
 aatgaatgtg ttctatttgc tttatacatt tatattaata aattgtacat 2000
 ttttctaatt 2010

<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met	Ala	Thr	His	Ala	Leu	Glu	Ile	Ala	Gly	Leu	Phe	Leu	Gly	Gly
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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp	
				20					25					30	
Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn	
				35					40					45	
Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile	
				50					55					60	
Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro	
				65					70					75	
Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met	
				80					85					90	
Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr	
				95					100					105	
Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu	
				110					115					120	
Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile	
				125					130					135	
Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn	
				140					145					150	
Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu	
				155					160					165	
Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala	
				170					175					180	
Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr	
				185					190					195	
Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His	
				200					205					210	
Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val	
				215					220					225	

<210> 121
 <211> 1257
 <212> DNA
 <213> Homo Sapien

<400> 121
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 ccgcctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
 gccccgcgcg ctccccgcag cggctccgcg gcctcctgct gctcctgctg 200
 ctgcagctgc ccgcgcgcgc gagcgctctt gagatcccca aggggaagca 250

aaaggcgag ctccggcaga gggagggtgt ggacctgtat aatgggaatgt 300
 gcttacaagg gccagcagga gtgcctgggtc gagacgggag ccctggggcc 350
 aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
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 aaaattgcgg agtgtacatt tacaaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
 agcgttggtg tttcacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700
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 gtgctggatt agtggatgtt gctatctggg ttggcacttg ttcagattac 800
 ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850
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 tgatttcaca ctgtttttta atctagcatt attcattttg cttcaatcaa 1050
 aagtggtttc aatatttttt ttagttgggt agaatacttt cttcatagtc 1100
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<210> 122

<211> 243

<212> PRT

<213> Homo Sapien

<400> 122

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Leu	Leu	Leu	Leu	Leu	Leu	Leu	Gln	Leu	Pro	Ala	Pro	Ser	Ser	Ala
				20					25					30

Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg
				35					40					45

Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50										55					60				
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro					
				65					70					75					
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys					
				80					85					90					
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn					
				95					100					105					
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu					
				110					115					120					
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser					
				125					130					135					
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg					
				140					145					150					
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu					
				155					160					165					
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln					
				170					175					180					
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser					
				185					190					195					
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp					
				200					205					210					
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp					
				215					220					225					
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu					
				230					235					240					

Leu Pro Lys

<210> 123
 <211> 2379
 <212> DNA
 <213> Homo Sapien

<400> 123
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 atacagatgt ggcagctcag gtagcccca attgcctgga agaatacatc 150
 atgtttttcg ataagaagaa attgtaggat ccagtttttt ttttaaccgc 200
 cccctcccca ccccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
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tggtgggatt tatttgttct tggagtgttc tgcgtggctg gcaaagaata 350
 atgttccaaa atcgggtccat ctcccaaggg gtccaatttt tcttcctggg 400
 tgtcagcgag ccctgactca ctacagtgcg gctgacaggg gctgtcatgc 450
 aactggcccc taagccaaag caaaagacct aaggacgacc tttgaacaat 500
 acaaaggatg gggtttcaatg taattaggct actgagcgga tcagctgtag 550
 cactgggttat agccccact gtcttactga caatgctttc ttctgccgaa 600
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 aaagggtca accagctcac ctggctatac cttgaccata accatatcag 800
 caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850
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 gtgacaaatt tacggaactt ggatctgtcc tataatcagc tgcattctct 950
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 ggtctaactc cctgagaacc atccctgtgc gaatattcca agactgccgc 1050
 aacctggaac ttttgacact gggatataac cggatccgaa gtttagccag 1100
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 atcaattttc caagctcaac ctggcccttt ttccaagggt ggctcagcctt 1200
 cagaaccttt acttgcatg gaataaaatc agtgatcatag gacagaccat 1250
 gtcttgacc tggagctcct taaaaggct tgatttatca ggcaatgaga 1300
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 ggattcttgg atatccctca atgacatcag tcttgctggg aatatatggg 1450
 aatgcagcag aaatatttgc tcccttgtaa actggctgaa aagttttaaa 1500
 ggtctaaggg agaatacaat tatctgtgcc agtcccaaag agctgcaagg 1550
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 ctacagagag gtttgatctg gccagggtc tcccaaagcc gacgtttaag 1650
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tcataatact ggtcattttc ctctcataca taatcaaccc attgaaattt 2250
aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
ttgtataaga ccctttactg attccattaa tgtcgcattt gttttaagat 2350
aaaacttctt tcataggtaa aaaaaaaaaa 2379

<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

Met	Gly	Phe	Asn	Val	Ile	Arg	Leu	Leu	Ser	Gly	Ser	Ala	Val	Ala
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Leu	Val	Ile	Ala	Pro	Thr	Val	Leu	Leu	Thr	Met	Leu	Ser	Ser	Ala
				20					25					30
Glu	Arg	Gly	Cys	Pro	Lys	Gly	Cys	Arg	Cys	Glu	Gly	Lys	Met	Val
				35					40					45
Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser
				50					55					60
Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys
				65					70					75
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu
				80					85					90
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe
				95					100					105
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg
				110					115					120
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu
				125					130					135

Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	
				140					145					150	
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg	
				155					160					165	
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys	
				170					175					180	
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser	
				185					190					195	
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu	
				200					205					210	
His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe	
				215					220					225	
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys	
				230					235					240	
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	
				245					250					255	
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	
				260					265					270	
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	
				275					280					285	
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	
				290					295					300	
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	
				305					310					315	
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe	
				320					325					330	
Lys	Gly	Leu	Arg	Glu	Asn	Thr	Ile	Ile	Cys	Ala	Ser	Pro	Lys	Glu	
				335					340					345	
Leu	Gln	Gly	Val	Asn	Val	Ile	Asp	Ala	Val	Lys	Asn	Tyr	Ser	Ile	
				350					355					360	
Cys	Gly	Lys	Ser	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ala	Arg	Ala	Leu	
				365					370					375	
Pro	Lys	Pro	Thr	Phe	Lys	Pro	Lys	Leu	Pro	Arg	Pro	Lys	His	Glu	
				380					385					390	
Ser	Lys	Pro	Pro	Leu	Pro	Pro	Thr	Val	Gly	Ala	Thr	Glu	Pro	Gly	
				395					400					405	
Pro	Glu	Thr	Asp	Ala	Asp	Ala	Glu	His	Ile	Ser	Phe	His	Lys	Ile	
				410					415					420	
Ile	Ala	Gly	Ser	Val	Ala	Leu	Phe	Leu	Ser	Val	Leu	Val	Ile	Leu	

	425		430		435
Leu Val Ile Tyr	Val Ser Trp Lys Arg	Tyr Pro Ala Ser Met	Lys		
	440		445		450
Gln Leu Gln Gln	Arg Ser Leu Met Arg	Arg His Arg Lys Lys	Lys		
	455		460		465
Arg Gln Ser Leu	Lys Gln Met Thr Pro	Ser Thr Gln Glu Phe	Tyr		
	470		475		480
Val Asp Tyr Lys	Pro Thr Asn Thr Glu	Thr Ser Glu Met Leu	Leu		
	485		490		495
Asn Gly Thr Gly	Pro Cys Thr Tyr Asn	Lys Ser Gly Ser Arg	Glu		
	500		505		510
Cys Glu Val					

<210> 125
 <211> 998
 <212> DNA
 <213> Homo Sapien

<400> 125
 ccgttatcgt cttgcgctac tgctgaatgt ccgtcccgga ggaggaggag 50
 aggccttttgc cgctgacca gagatggccc cgagcgagca aattcctact 100
 gtccggctgc gcggtaccg tggccgagct agcaaccttt cccctggatc 150
 tcacaaaaac tgcactcaa atgcaaggag aagcagctct tgctcggttg 200
 ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250
 cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300
 caccgcctat ttacagacac gtagtgtatt ctggaggctg aatggtcaca 350
 tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
 tccccctttg aaatcagtc ttggagggat gatggctggt gttattggcc 450
 agtttttagc caatccaact gacctagtga aggttcagat gcaaattggaa 500
 ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
 tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600
 gctgggtacc caatatacaa agagcagcac tggatgaatat gggagattta 650
 accacttatg atacagtga acactacttg gtattgaata caccacttga 700
 ggacaatatc atgactcacg gtttatcaag tttatgttct ggactggtag 750
 cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800

caaccacgag ataaacaagg aaggggactt ttgtataaat catcgactga 850
 ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
 gctttttacc atcttggtcg agaattgaccc cttgggtcaat ggtgttctgg 950
 cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126
 <211> 323
 <212> PRT
 <213> Homo Sapien

<400> 126
 Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln
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 Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala
 20 25 30
 Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr
 35 40 45
 Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp
 50 55 60
 Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala
 65 70 75
 Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly
 80 85 90
 Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg
 95 100 105
 Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser
 110 115 120
 Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
 125 130 135
 Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
 140 145 150
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
 155 160 165
 Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
 170 175 180
 Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
 185 190 195
 Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
 200 205 210
 Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
 215 220 225

Asp	Asn	Ile	Met	Thr	His	Gly	Leu	Ser	Ser	Leu	Cys	Ser	Gly	Leu	230	235	240
Val	Ala	Ser	Ile	Leu	Gly	Thr	Pro	Ala	Asp	Val	Ile	Lys	Ser	Arg	245	250	255
Ile	Met	Asn	Gln	Pro	Arg	Asp	Lys	Gln	Gly	Arg	Gly	Leu	Leu	Tyr	260	265	270
Lys	Ser	Ser	Thr	Asp	Cys	Leu	Ile	Gln	Ala	Val	Gln	Gly	Glu	Gly	275	280	285
Phe	Met	Ser	Leu	Tyr	Lys	Gly	Phe	Leu	Pro	Ser	Trp	Leu	Arg	Met	290	295	300
Thr	Pro	Trp	Ser	Met	Val	Phe	Trp	Leu	Thr	Tyr	Glu	Lys	Ile	Arg	305	310	315
Glu	Met	Ser	Gly	Val	Ser	Pro	Phe								320		

<210> 127
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 127
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 cgtcagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100
 ggcgtggggc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150
 gcgctggtga cggggggcctc gggggggcatc ggcgcggccg tggcccgggc 200
 cctggtccag cagggaactga aggtggtggg ctgcgcccgc actgtgggca 250
 acatcgagga gctggctgct gaatgtaaga gtgcaggcta ccccgggact 300
 ttgatccct acagatgtga cctatcaa at gaagaggaca tcctctccat 350
 gttctcagct atccgttctc agcacagcgg tgtagacatc tgcataca 400
 atgctggctt ggcccggcct gacaccctgc tctcaggcag caccagtgg 450
 tggaaggaca tgttcaatgt gaacgtgctg gccctcagca tctgcacacg 500
 ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550
 ttaacatcaa tagcatgtct ggccaccgag tgttaccct gtctgtgacc 600
 cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650
 gaggcaagag cttcgggagg cccagacca catccgagcc acgtgcatct 700
 ctccaggtgt ggtggagaca caattcgct tcaaactcca cgacaaggac 750
 cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccgga 800

ggatgtggcc gaggtgttta tctacgtcct cagcaccccc gcacacatcc 850
 agattggaga catccagatg aggcccacgg agcaggtgac ctagtgactg 900
 tgggagctcc tcttccctc cccacccttc atggcttgcc tctgcctct 950
 ggatttttagg tgttgatttc tggatcacgg gataccactt cctgtccaca 1000
 ccccgaccag gggctagaaa atttgtttga gatttttata tcatcttgtc 1050
 aaattgcttc agttgtaaat gtgaaaaatg ggctggggaa aggaggtggt 1100
 gtccctaatt gttttacttg ttaacttggt cttgtgcccc tgggcacttg 1150
 gcctttgtct gctctcagtg tcttcccttt gacatgggaa aggagttgtg 1200
 gccaaaatcc ccatcttctt gcacctcaac gtctgtggct cagggctggg 1250
 gtggcagagg gaggccttca ccttatatct gtgttggttat ccagggctcc 1300
 agacttcctc ctctgcctgc cccactgcac cctctcccc ttatctatct 1350
 ccttctcggc tccccagccc agtcttggt tcttgtcccc tctggggtc 1400
 atccctccac tctgactctg actatggcag cagaacacca gggcctggcc 1450
 cagtggattt catggtgatc attaaaaag aaaaatcgca accaaaaaaa 1500
 aaaaa 1505

<210> 128

<211> 260

<212> PRT

<213> Homo Sapien

<400> 128

Met	Ala	Arg	Pro	Gly	Met	Glu	Arg	Trp	Arg	Asp	Arg	Leu	Ala	Leu	1	5	10	15
Val	Thr	Gly	Ala	Ser	Gly	Gly	Ile	Gly	Ala	Ala	Val	Ala	Arg	Ala	20	25	30	
Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	35	40	45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	50	55	60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	65	70	75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	80	85	90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	95	100	105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val				

110	115	120
Asn Val Leu Ala	Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser	
125	130	135
Met Lys Glu Arg	Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn	
140	145	150
Ser Met Ser Gly	His Arg Val Leu Pro Leu Ser Val Thr His Phe	
155	160	165
Tyr Ser Ala Thr	Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu	
170	175	180
Arg Gln Glu Leu	Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys	
185	190	195
Ile Ser Pro Gly	Val Val Glu Thr Gln Phe Ala Phe Lys Leu His	
200	205	210
Asp Lys Asp Pro	Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys	
215	220	225
Cys Leu Lys Pro	Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu	
230	235	240
Ser Thr Pro Ala	His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro	
245	250	255
Thr Glu Gln Val	Thr	
260		

<210> 129
 <211> 1177
 <212> DNA
 <213> Homo Sapien

<400> 129
 aactttctaca tgggcctcct gctgctggtg ctcttcctca gcctcctgcc 50
 ggtggcctac accatcatgt cctccacc ctcctttgac tgcgggccgt 100
 tcaggtgcag agtctcagtt gcccgaggagc acctccctc ccgaggcagt 150
 ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
 tgtaaaaggc catggaactt tgggtgaatc accgatgcca tttaagaggg 250
 ttttctgcca ggatggaaat gttaggtcgt tctgtgtctg cgctgttcat 300
 ttcagtagcc accagccacc tgtggccggt gagtgcttga aatgaggaac 350
 tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
 actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450
 tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500

acatttattt tttattcttt ttagacagag tctcactctg tcacccaggc 550
 tggagtgcag tggtgccatc tcagcttact gcaacctctg cctgccaggt 600
 tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
 gcaccacaat gcccactaa tttttgtatt tttagtagag acgggggttt 700
 gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
 gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
 gcctaaacat ttatcttttc tttgtgttgg gaactttgaa attatacaat 850
 gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900
 tcttcctct atctaactgt atatttgtac cagttaacca accgtacttc 950
 atccccactc ctctctatcc ttcccaacct ctgatcacct cattctactc 1000
 tctacctcca tgagatccac ttttttagct cccacatgtg agtaagaaaa 1050
 tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
 tcctgttcca tccatgttgc tgcaaagac aggatttcgt tcttaatttc 1150
 aattaaata accacacatg gcaaaaa 1177

<210> 130
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 130
 Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val
 1 5 10 15
 Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
 20 25 30
 Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
 35 40 45
 Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val
 50 55 60
 Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro
 65 70 75
 Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser
 80 85 90
 Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val
 95 100 105
 Ala Val Glu Cys Leu Lys
 110

<210> 131
<211> 2061
<212> DNA
<213> Homo Sapien

<400> 131
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atgatcagcg cagcctggag catcttctc atcgggacta aaattgggct 100
gttcttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg ctttctgaca 200
tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
caaccaaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
aagtagaaag aatataccta taccacaaca gtttagatga atttcctacc 350
aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
atthagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
cgagacagca actatctccg actgcttttc ctgtcccgta atcaccttag 550
cacaattccc tgggggttgc ccaggactat agaagaacta cgcttggatg 600
ataatcgcat atccactatt tcatcaccat ctcttcaagg tctcactagt 650
ctaaaacgcc tgggtctaga tggaaacctg ttgaacaatc atgggttagg 700
tgacaaagtt ttcttcaacc tagttaattt gacagagctg tccctgggtg 750
ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
ttcttatcta aggagctct atcgactgga tatgtccaat aataacctaa 900
gtaatttacc tcagggtatc tttgatgatt tggacaatat aacacaactg 950
attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
tgactgggta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050
gccaagcccc agaaaagggt cgtgggatgg ctattaagga tctcaatgca 1100
gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150
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cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
caaaccacag ggagtccttc aagaaaaaca attacaatta ctgtgaagtc 1300

tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
 ctgcttttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
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 agagaaaagaa ccttacaaaa accccaattt acctttgggt gccatcattg 1650
 gtggggctgt ggccctgggt accattgccc ttcttgcttt agtgtgttg 1700
 tatgttcata ggaatggatc gctcttctca aggaactgtg catatagcaa 1750
 agggaggaga agaaaggatg actatgcaga agctggcact aagaaggaca 1800
 actctatcct ggaaatcagg gaaacttctt ttcagatgtt accaataagc 1850
 aatgaaccca tctcgaagga ggagtttgta atacacacca tatttcctcc 1900
 taatggaatg aatctgtaca aaaacaatca cagtgaagc agtagtaacc 1950
 gaagctacag agacagtggg attccagact cagatcactc acactcatga 2000
 tgctgaagga ctcacagcag acttgtgttt tgggtttttt aaacctaagg 2050
 gaggtgatgg t 2061

<210> 132
 <211> 649
 <212> PRT
 <213> Homo Sapien

<400> 132
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 Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser
 20 25 30
 Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn
 35 40 45
 Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
 50 55 60
 Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
 65 70 75
 Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
 80 85 90
 Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
 95 100 105

Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr	110	115	120
Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu	125	130	135
Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe	140	145	150
Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His	155	160	165
Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu	170	175	180
Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu	185	190	195
Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu	200	205	210
Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe Asn Leu Val	215	220	225
Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala	230	235	240
Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu Gln	245	250	255
Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu	260	265	270
Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn	275	280	285
Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu	290	295	300
Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp	305	310	315
Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg	320	325	330
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile	335	340	345
Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile	350	355	360
Val Ser Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr	365	370	375
Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp	380	385	390
Ile Lys Asn Pro Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser			

395					400					405				
Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr	Val	Lys	Ser	Val	Thr	Ser
410					415					420				
Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala	Leu	Pro	Met	Thr	Ala
425					430					435				
Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser	Pro	Ala	Phe	Gly
440					445					450				
Ser	Ile	Thr	Glu	Thr	Ile	Val	Thr	Gly	Glu	Arg	Ser	Glu	Tyr	Leu
455					460					465				
Val	Thr	Ala	Leu	Glu	Pro	Asp	Ser	Pro	Tyr	Lys	Val	Cys	Met	Val
470					475					480				
Pro	Met	Glu	Thr	Ser	Asn	Leu	Tyr	Leu	Phe	Asp	Glu	Thr	Pro	Val
485					490					495				
Cys	Ile	Glu	Thr	Glu	Thr	Ala	Pro	Leu	Arg	Met	Tyr	Asn	Pro	Thr
500					505					510				
Thr	Thr	Leu	Asn	Arg	Glu	Gln	Glu	Lys	Glu	Pro	Tyr	Lys	Asn	Pro
515					520					525				
Asn	Leu	Pro	Leu	Ala	Ala	Ile	Ile	Gly	Gly	Ala	Val	Ala	Leu	Val
530					535					540				
Thr	Ile	Ala	Leu	Leu	Ala	Leu	Val	Cys	Trp	Tyr	Val	His	Arg	Asn
545					550					555				
Gly	Ser	Leu	Phe	Ser	Arg	Asn	Cys	Ala	Tyr	Ser	Lys	Gly	Arg	Arg
560					565					570				
Arg	Lys	Asp	Asp	Tyr	Ala	Glu	Ala	Gly	Thr	Lys	Lys	Asp	Asn	Ser
575					580					585				
Ile	Leu	Glu	Ile	Arg	Glu	Thr	Ser	Phe	Gln	Met	Leu	Pro	Ile	Ser
590					595					600				
Asn	Glu	Pro	Ile	Ser	Lys	Glu	Glu	Phe	Val	Ile	His	Thr	Ile	Phe
605					610					615				
Pro	Pro	Asn	Gly	Met	Asn	Leu	Tyr	Lys	Asn	Asn	His	Ser	Glu	Ser
620					625					630				
Ser	Ser	Asn	Arg	Ser	Tyr	Arg	Asp	Ser	Gly	Ile	Pro	Asp	Ser	Asp
635					640					645				
His Ser His Ser														

<210> 133
 <211> 1882
 <212> DNA
 <213> Homo Sapien

<400> 133

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c c a g g c t t c t t g g c a g c c c t g c c g g g c c a c t t g t c t t c a t g t c t g c c a g g 100
g g g a g g t g g g a a g g a g g t g g g a g g a g g g c g t g c a g a g g c a g t c t g g g c t t 150
g g c c a g a g c t c a g g g t g c t g a g c g t g t g a c c a g c a g t g a g c a g a g g c c g g 200
c c a t g g c c a g c c t g g g g c t g c t g c t c c t g c t c t t a c t g a c a g c a c t g c c a 250
c c g c t g t g g t c c t c c t c a c t g c c t g g g c t g g a c a c t g c t g a a g t a a a g c 300
c a c c a t t g c a g a c c t g a t c c t g t c t g c g c t g g a g a g a g c c a c c g t c t t c c 350
t a g a a c a g a g g c t g c c t g a a a t c a a c c t g g a t g g c a t g g t g g g g t c c g a 400
g t g c t g g a a g a g c a g c t a a a a a g t g t c c g g g a g a a g t g g g c c c a g g a g c c 450
c c t g c t g c a g c c g c t g a g c c t g c g c g t g g g a t g c t g g g g a g a a g c t g g 500
a g g c t g c c a t c c a g a g a t c c c t c c a c t a c c t c a a g c t g a g t g a t c c c a a g 550
t a c c t a a g a g a g t t c c a g c t g a c c c t c c a g c c c g g g t t t t g g a a g c t c c c 600
a c a t g c c t g g a t c c a c a c t g a t g c c t c c t t g g t g t a c c c c a c g t t c g g g c 650
c c c a g g a c t c a t t c t c a g a g g a g a a a g t g a c g t g t g c c t g g t g c a g c t g 700
c t g g g a a c c g g g a c g g a c a g c a g c g a g c c c t g c g g c c t c t c a g a c c t c t g 750
c a g g a g c c t c a t g a c c a a g c c c g g c t g c t c a g g c t a c t g c c t g t c c c a c c 800
a a c t g c t c t t c t t c c t c t g g g c c a g a a t g a g g g g a t g c a c a c a g g g a c c a 850
c t c c a a c a g a g c c a g g a c t a t a t c a a c c t c t t c t g c g c c a a c a t g a t g g a 900
c t t g a a c c g c a g a g c t g a g g c c a t c g g a t a c g c c t a c c c t a c c c g g g a c a 950
t c t t c a t g g a a a c a t c a t g t t c t g t g g a a t g g g c g g c t t c t c c g a c t t c 1000
t a c a a g c t c c g g t g g c t g g a g g c a t t c t c a g c t g g c a g a a c a g c a g g a 1050
a g g a t g c t t c g g g g a g c c t g a t g c t g a a g a t g a a g a a t t a t c t a a a g c t a 1100
t t c a a t a t c a g c a g c a t t t t t c g a g g a g a g t g a a g a g g c g a g a a a a c a a 1150
t t t c c a g a t t c t c g c t c t g t g c t c a g g c t g g a g t a c a g t g g c g c a a t c t 1200
c g g c t c a c t g c a a c c t t t g c c t c t g g g t t c a a g c a a t t c t c t t g c c t c a 1250
t c c t c c c g a g t a g c t g g g a c t a c a g g a g c g t g c c a c c a t a c c t g g c t a a t 1300
t t t t a t a t t t t t t t a g t a g a g a c a g g g t t t c a t c a t g t t g c t c a t g c t g g 1350
t c t c g a a c t c c t g a t c t c a a g a g a t c c g c c c a c c t c a g g c t c c c a a a g t g 1400
t g g g a t t a t a g g t g t g a g c c a c c g t g t c t g g c t g a a a a g c a c t t t c a a a g 1450

agactgtgtt gaataaaggg ccaaggttct tgccaaccag cactcatggg 1500
 ggctctctcc cctagatggc tgctcctccc acaacacagc cacagcagtg 1550
 gcagccctgg gtggcttctt atacatcctg gcagaatacc cccagcaaa 1600
 cagagagcca caccatcca caccgccacc accaagcagc cgctgagacg 1650
 gacggttcca tgccagctgc ctggaggagg aacagacccc tttagtcttc 1700
 atcccttaga tcttgagggg cacggatcac atcctgggaa gaaggcatct 1750
 ggaggataag caaagccacc ccgacacca atcttggaag ccctgagtag 1800
 gcagggccag ggtaggtggg ggccgggagg gaccaggtg tgaacggatg 1850
 aataaagttc aactgcaact gaaaaaaaaa aa 1882

<210> 134
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 134
 Met Ser Ala Arg Gly Arg Trp Glu Gly Gly Gly Arg Arg Ala Cys
 1 5 10 15
 Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val
 20 25 30
 Thr Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu
 35 40 45
 Leu Leu Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser
 50 55 60
 Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp
 65 70 75
 Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln
 80 85 90
 Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly Val Arg Val
 95 100 105
 Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala Gln Glu
 110 115 120
 Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly Glu
 125 130 135
 Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
 140 145 150
 Ser Asp Pro Lys Tyr Leu Arg Glu Phe Gln Leu Thr Leu Gln Pro
 155 160 165
 Gly Phe Trp Lys Leu Pro His Ala Trp Ile His Thr Asp Ala Ser

170										175					180					
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu						
				185					190					195						
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp						
				200					205					210						
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met						
				215					220					225						
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu						
				230					235					240						
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu						
				245					250					255						
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met						
				260					265					270						
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr						
				275					280					285						
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly						
				290					295					300						
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser						
				305					310					315						
Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu						
				320					325					330						
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser						
				335					340					345						
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser						
				350					355					360						
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln						
				365					370					375						
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro						
				380					385					390						
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe						
				395					400					405						
Tyr	Ile	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Ala	His	Ala						
				410					415					420						
Gly	Leu	Glu	Leu	Leu	Ile	Ser	Arg	Asp	Pro	Pro	Thr	Ser	Gly	Ser						
				425					430					435						
Gln	Ser	Val	Gly	Leu																
				440																

<210> 135
<211> 884

<212> DNA
<213> Homo Sapien

<400> 135
ggtctgagtg cagagctgct gtcattggcgg ccgctctgtg gggcttcttt 50
cccgtcctgc tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100
gcccggggct gctgctgagg gatcgggagg gaggggggtc ggcataaggag 150
atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200
gactggatct cggcggcccc agtgctggta gacggagaag agcacgtcgg 250
tttccttaag acagatggga gttttgtggt tcatgatata ctttctggat 300
cttatgtagt ggaagtgtga tctccagctt acagatttga tcccgttcga 350
gtggatatca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400
caaaacatca gaggttgtca gactgcccta tcctctccaa atgaaatctt 450
cagggtccacc ttcttacttt attaaaaggg aatcgtgggg ctggacagac 500
tttctaataa acccaatggg tatgatgatg gttcttcctt tattgatatt 550
tgtgtcttct cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600
aaatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650
gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaata 700
tagcagcggc agcagtaaaa caggcaaaaag tggggctggc aaaaggaggt 750
agtcaggccg tccagagctg gcatttgcac aaacacggca acactgggtg 800
gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850
atccccagct tgatctctta caactgtgta tggt 884

<210> 136
<211> 242
<212> PRT
<213> Homo Sapien

<400> 136
Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
1 5 10 15
Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
20 25 30
Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
35 40 45
Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
 65 70 75
 Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
 80 85 90
 Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
 95 100 105
 Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
 110 115 120
 Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
 125 130 135
 Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
 140 145 150
 Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
 155 160 165
 Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
 170 175 180
 Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu
 185 190 195
 Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val
 200 205 210
 Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys
 215 220 225
 Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys
 230 235 240
 Arg Arg

<210> 137
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 137
 gatggcgag ccacagcttc tgtgagattc gatttctccc cagttcccct 50
 gtgggtctga ggggaccaga agggtagct acgttggtt tctggaagg 100
 gaggtatat gcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150
 atgtcattct ctatctattc actgcaagt cctgctgttc caggccttac 200
 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
 cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300
 ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350

tttcaggcct aagatgaaag cctctagtct tgccttcagc cttctctctg 400
 ctgcggtttta tctcctatgg actccttcca ctggactgaa gacactcaat 450
 ttgggaagct gtgtgatcgc cacaaacctt caggaaatac gaaatggatt 500
 ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550
 gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaatcga 600
 tgctgcctcc tgcgccattt gctaagactc tatctggaca gggatattta 650
 aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700
 ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750
 atgacatgcc attgtgggga ggaagcaatg aagaaataca gccagattct 800
 gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850
 gggaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900
 agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
 acctgcagag gaggcctgac cccaaaccac catctcttta ctgtactagt 1000
 cttgtgctgg tcacagtgta tcttatttat gcattacttg cttccttgca 1050
 tgattgtctt tatgcatccc caatcttaat tgagaccata cttgtataag 1100
 atttttgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150
 tatttatttt ttgctattta atgtatttat ttttttactt ggacatgaaa 1200
 ctttaaaaaa attcacagat tatatttata acctgactag agcaggtgat 1250
 gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
 ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
 gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
 tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
 ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
 aatcctacac ggccagcatg tattttctaca aataaagttt tctttgcata 1550
 ccaaaaaaaaa aaaaaaaaaa a 1571

<210> 138
 <211> 261
 <212> PRT
 <213> Homo Sapien

<400> 138
 Met Arg Gln Phe Pro Lys Thr Ser Phe Asp Ile Ser Pro Glu Met
 1 5 10 15

Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu
 20 25 30
 Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
 35 40 45
 Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
 50 55 60
 Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
 65 70 75
 Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
 80 85 90
 Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
 95 100 105
 Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
 110 115 120
 Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
 125 130 135
 Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
 140 145 150
 Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
 155 160 165
 Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
 170 175 180
 Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
 185 190 195
 Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
 200 205 210
 Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
 215 220 225
 Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
 230 235 240
 Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln
 245 250 255
 Trp Met Glu Glu Thr Glu
 260

<210> 139

<211> 2395

<212> DNA

<213> Homo Sapien

<400> 139

cctggagccg gaagcgcggc tgcagcaggg cgaggctcca ggtggggctcg 50

gttccgcac cagcctagcg tgtccacgat gcggctgggc tccgggactt 100
 tcgctacctg ttgcgtagcg atcgaggtgc tagggatcgc ggtcttcctt 150
 cggggattct tcccggctcc cgttcgttcc tctgccagag cggaacacgg 200
 agcggagccc ccagcgcccc aaccctcggc tggagccagt tctaactgga 250
 ccacgctgcc accacctctc ttcagtaaag ttgttattgt tctgatagat 300
 gccttgagag atgattttgt gtttgggtca aaggggtgta aatttatgcc 350
 ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400
 aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
 gggagccttc ctggctttgt cgacgtcac aggaacctca attctcctgc 500
 actgctggaa gacagtgtga taagacaagc aaaagcagct ggaaaaagaa 550
 tagtctttta tggagatgaa acctgggtta aattattccc aaagcatttt 600
 gtggaatatg atggaacaac ctcatTTTTt gtgtcagatt acacagaggt 650
 ggataataat gtcacgaggc atttggataa agtattaaaa agaggagatt 700
 gggacatatt aatcctccac tacctggggc tggaccacat tggccacatt 750
 tcagggccca acagccccct gattgggcag aagctgagcg agatggacag 800
 cgtgctgatg aagatccaca cctcactgca gtcgaaggag agagagacgc 850
 ctttacccaa tttgctgggt ctttgtgggt accatggcat gtctgaaaca 900
 ggaagtcacg gggcctcctc caccgaggag gtgaatacac ctctgatttt 950
 aatcagttct gcgtttgaaa ggaaaccogg tgatatccga catccaaagc 1000
 acgtccaata gacggatgtg gctgcgacac tggcgatagc acttggctta 1050
 ccgattccaa aagacagtgt agggagcctc ctattcccag ttgtggaagg 1100
 aagaccaatg agagagcagt tgagattttt acatttgaat acagtgcagc 1150
 ttagtaaaact gttgcaagag aatgtgccgt catatgaaaa agatcctggg 1200
 tttgagcagt ttaaaatgtc agaaagattg catgggaact ggatcagact 1250
 gtacttggag gaaaagcatt cagaagtctt attcaacctg ggctccaagg 1300
 ttctcaggca gtacctggat gctctgaaga cgctgagctt gtccctgagt 1350
 gcacaagtgg ccagttctc accctgctcc tgctcagcgt cccacaggca 1400
 ctgcacagaa aggctgagct ggaagtccca ctgtcatctc ctgggttttc 1450
 tctgctcttt tatttgggtga tcctgggtct ttcggccgtt cacgtcattg 1500

tgtgcacctc agctgaaagt tctgtctact tctgtggcct ctctgtggctg 1550
 gcggcaggct gcctttcgtt taccagactc tggttgaaca cctggtgtgt 1600
 gccaaagtgt ggcagtgcc tggacagggg gcctcagggg aggacgtgga 1650
 gcagccttat ccaggcctc tgggtgtccc gacacagggtg ttcacatctg 1700
 tgctgtcagg tcagatgcct cagttcttgg aaagctaggt tcctgcgact 1750
 gttaccaagg tgattgtaaa gagctggcgg tcacagagga acaagcccc 1800
 cagctgaggg ggtgtgtgaa tcggacagcc tcccagcaga ggtgtgggag 1850
 ctgcagctga ggaagaaga gacaatcggc ctggacactc aggaggggtca 1900
 aaaggagact tggtcgcacc actcatcctg ccacccccag aatgcacct 1950
 gcctcatcag gtccagattt cttccaagg cggacgtttt ctgttggaat 2000
 tcttagtcct tggcctcgga caccttcatt cgtagctgg ggagtgggtg 2050
 tgaggcagtg aagaagaggc ggatggcac actcagatcc acagagccca 2100
 ggatcaaggg acccactgca gtggcagcag gactgttggg cccccaccc 2150
 aacctgcac agccctcatc ccctcttggc ttgagccgtc agaggccctg 2200
 tgctgagtgt ctgaccgaga cactcacagc tttgtcatca gggcacaggc 2250
 ttctctggag ccaggatgat ctgtgccacg cttgcacctc gggcccatct 2300
 gggctcatgc tctctctcct gctattgaat tagtacctag ctgcacacag 2350
 tatgtagtta ccaaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140
 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 140
 Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile
 1 5 10 15
 Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala
 20 25 30
 Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro
 35 40 45
 Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu
 50 55 60
 Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala
 65 70 75
 Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met

80										85					90				
Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe					
				95					100					105					
Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys					
				110					115					120					
Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg					
				125					130					135					
Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln					
				140					145					150					
Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr					
				155					160					165					
Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr					
				170					175					180					
Thr	Ser	Phe	Phe	Val	Ser	Asp	Tyr	Thr	Glu	Val	Asp	Asn	Asn	Val					
				185					190					195					
Thr	Arg	His	Leu	Asp	Lys	Val	Leu	Lys	Arg	Gly	Asp	Trp	Asp	Ile					
				200					205					210					
Leu	Ile	Leu	His	Tyr	Leu	Gly	Leu	Asp	His	Ile	Gly	His	Ile	Ser					
				215					220					225					
Gly	Pro	Asn	Ser	Pro	Leu	Ile	Gly	Gln	Lys	Leu	Ser	Glu	Met	Asp					
				230					235					240					
Ser	Val	Leu	Met	Lys	Ile	His	Thr	Ser	Leu	Gln	Ser	Lys	Glu	Arg					
				245					250					255					
Glu	Thr	Pro	Leu	Pro	Asn	Leu	Leu	Val	Leu	Cys	Gly	Asp	His	Gly					
				260					265					270					
Met	Ser	Glu	Thr	Gly	Ser	His	Gly	Ala	Ser	Ser	Thr	Glu	Glu	Val					
				275					280					285					
Asn	Thr	Pro	Leu	Ile	Leu	Ile	Ser	Ser	Ala	Phe	Glu	Arg	Lys	Pro					
				290					295					300					
Gly	Asp	Ile	Arg	His	Pro	Lys	His	Val	Gln										
				305					310										

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcacgaggc aagccttcca gggtatcgtg acgcaccttg aaagtctgag 50

agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100

tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150

cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200
 gaaattcagc attcatgacc aggatcacia agtactggtc ctggactctg 250
 ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300
 tttgcattag cctcatcctt gagctcagcc tctgaggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500
 ggctcagggt ggctcctgga acatgctgga gtcggcggct caccctggat 550
 ggttcattctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650
 agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700
 acgccttctt cgctaatttg aactaattgt ataaaaacac caaacctgct 750
 cact 754

<210> 142
 <211> 193
 <212> PRT
 <213> Homo Sapien

<400> 142
 Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn 15
 1 5 10
 Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu 30
 20 25 30
 Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu 45
 35 40 45
 Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr 60
 50 55 60
 Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser 75
 65 70 75
 Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys 90
 80 85 90
 Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His 105
 95 100 105
 Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala 120
 110 115 120
 Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln 135
 125 130 135

Val	Gly	Ser	Trp	Asn	Met	Leu	Glu	Ser	Ala	Ala	His	Pro	Gly	Trp	
				140					145					150	
Phe	Ile	Cys	Thr	Ser	Cys	Asn	Cys	Asn	Glu	Pro	Val	Gly	Val	Thr	
				155					160					165	
Asp	Lys	Phe	Glu	Asn	Arg	Lys	His	Ile	Glu	Phe	Ser	Phe	Gln	Pro	
				170					175					180	
Val	Cys	Lys	Ala	Glu	Met	Ser	Pro	Ser	Glu	Val	Ser	Asp			
				185					190						

<210> 143
 <211> 961
 <212> DNA
 <213> Homo Sapien

<400> 143
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 ctgttgccag tgtggggtga gacaagtttg tcccacaggg ctgtctgagc 150
 agataagatt aagggctggg tctgtgctca attaactcct gtgggcacgg 200
 gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250
 cctgccgtgg aagggaggtc tgtcctgggc gctgctgctg cttctcttag 300
 gctcccagat cctgctgata tatgcctggc atttccacga gcaaagggac 350
 tgtgatgaac acaatgtcat ggctcgttac ctccctgccca cagtggagtt 400
 tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
 tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500
 ttctcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550
 cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
 tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650
 ctctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700
 caggcttgct catgtgctgc tcccacattc cgtggacatc agcactactc 750
 tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatect 800
 attttgcatg tgtttgagat ctgagatcag tgttttagaa aatccacaca 850
 tcttgagcct aatcatgtag tgtagatcat taaacatcag cattttaaga 900
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
 aaaaaaaaaa a 961

<210> 144
 <211> 147
 <212> PRT
 <213> Homo Sapien

<400> 144
 Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
 1 5 10 15
 Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
 20 25 30
 Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
 35 40 45
 Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
 50 55 60
 Gln Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn
 65 70 75
 Ser Trp Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu
 80 85 90
 Leu Leu Leu Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile
 95 100 105
 Asp Asn Cys His Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe
 110 115 120
 Thr Cys Phe Phe Thr Ile Ser Thr Arg Pro Trp Met Thr Gln Phe
 125 130 135
 Ser Leu Leu Asn Lys Thr Cys Leu Glu Gly Phe His
 140 145

<210> 145
 <211> 1157
 <212> DNA
 <213> Homo Sapien

<400> 145
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 gacgcgatga ggaagcacct gagctggtgg tggctggcca ctgtctgcat 100
 gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150
 gaatcaagtg gaaccggaag gccctgcccc gcactgcccc gatcactgag 200
 gccaggtgg ctgagaaccg cccgggagcc ttcattcaagc aaggccgcaa 250
 gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300
 actggcagtt ccccgatggc atccactaca acggctgctc tgaggctaata 350
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca cccagggcggc 400

gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
 ttggagaggg gcgcaggact tcgggtcacc atgcaccagc cagtgtcct 550
 ctgccttctg gctttgatct ggctcatggt gaaataagct tgccaggagg 600
 ctggcagtag agagcgcagc agcgagcaaa tcttggcaag tgaccagct 650
 cttctcccc aaaccacgc gtgttctgaa ggtgcccagg agcggcgatg 700
 cactcgact gcaaagtccg ctcccacgta tgcgccctgg tatgtgcctg 750
 cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800
 cctagcagag cgtctggcac actagattag tagtaaagtc ttgatgagaa 850
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 ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950
 gagctgaagt actgcacca gcatcaccag ctagaaagtg gcagagccag 1000
 gattcaacct tggcttgtct aaccccagggt tttctgctct gtccaattcc 1050
 agagctgtct ggtgatcact ttatgtctca cagggacca catccaaaca 1100
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<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met	Arg	Lys	His	Leu	Ser	Trp	Trp	Trp	Leu	Ala	Thr	Val	Cys	Met
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Leu	Leu	Phe	Ser	His	Leu	Ser	Ala	Val	Gln	Thr	Arg	Gly	Ile	Lys
				20					25					30
His	Arg	Ile	Lys	Trp	Asn	Arg	Lys	Ala	Leu	Pro	Ser	Thr	Ala	Gln
				35					40					45
Ile	Thr	Glu	Ala	Gln	Val	Ala	Glu	Asn	Arg	Pro	Gly	Ala	Phe	Ile
				50					55					60
Lys	Gln	Gly	Arg	Lys	Leu	Asp	Ile	Asp	Phe	Gly	Ala	Glu	Gly	Asn
				65					70					75
Arg	Tyr	Tyr	Glu	Ala	Asn	Tyr	Trp	Gln	Phe	Pro	Asp	Gly	Ile	His
				80					85					90
Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val
				95					100					105

Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe
110 115 120
Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu
125 130 135
Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu
140 145 150
Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu
155 160 165
Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys
170 175

<210> 147
<211> 333
<212> DNA
<213> Homo Sapien

<400> 147
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tccagagtct catttcctga tgatttatag actcaaagaa aactcatgtt 100
cagaagctct cttctcttct ggctcctct ctgtcttctt tccctctttc 150
ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
tttcattttg cttgtcagtg gggtaggtca ctgagtctta gtttttattt 250
tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
atgagtatat tgcattgatgc tgagggtttgg ggt 333

<210> 148
<211> 73
<212> PRT
<213> Homo Sapien

<400> 148
Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
1 5 10 15
Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
20 25 30
Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
35 40 45
Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
50 55 60
Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
65 70

<210> 149
<211> 1893

<212> DNA
<213> Homo Sapien

<400> 149
gtctccgct cacaggaact tcagcaccca cagggcggac agcgctcccc 50
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ccgtcgagtg tcagagatcc tgcagccgcc cagtcccggc ccctctcccg 150
ccccacaccc accctcctgg ctcttcctgt ttttactcct ccttttcatt 200
cataacaaaa gctacagctc caggagccca gcgccgggct gtgacccaag 250
ccgagcgtgg aagaatgggg ttctcggga ccggcacttg gattctggtg 300
ttagtgctcc cgattcaagc tttcccaaaa cctggaggaa gccaagacaa 350
atctctacat aatagagaat taagtgcaga aagacctttg aatgaacaga 400
ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
aagccaggtc agagcaacta ttcttttgtt gataacttga acctgctaaa 500
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600
aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
taaatttcaa gatgatccag atggtcttca tcaactagac gggactcctt 700
taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
aatgacagag ccgtgtttga caagattgtt tctaaactac ttaatctcgg 800
ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
ttttacaaaa attaattctca aaggaagcca acaattatga ggaggatccc 900
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
agtgaactca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000
atgaaacagt atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050
actaaaacct acagtgaaga caactttgag gaactccaat atttcccaaa 1100
tttctatgcy ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150
aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200
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catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
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 gaaagacaga tgaacccaaa ggaaaaacag aagcctatctt ggaagccatc 1500
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 ctgtttcaga aaacataata tagcttaaaa cacttctaata tctgtgatta 1750
 aaattttttg acccaaggggt tattagaaag tgctgaattt acagtagtta 1800
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 aaagtaaagt tgtatgtaag ctgaaaaaaaa aaaaaaaaaa aaa 1893

<210> 150

<211> 468

<212> PRT

<213> Homo Sapien

<400> 150

Met	Gly	Phe	Leu	Gly	Thr	Gly	Thr	Trp	Ile	Leu	Val	Leu	Val	Leu	1	5	10	15
Pro	Ile	Gln	Ala	Phe	Pro	Lys	Pro	Gly	Gly	Ser	Gln	Asp	Lys	Ser	20	25	30	
Leu	His	Asn	Arg	Glu	Leu	Ser	Ala	Glu	Arg	Pro	Leu	Asn	Glu	Gln	35	40	45	
Ile	Ala	Glu	Ala	Glu	Glu	Asp	Lys	Ile	Lys	Lys	Thr	Tyr	Pro	Pro	50	55	60	
Glu	Asn	Lys	Pro	Gly	Gln	Ser	Asn	Tyr	Ser	Phe	Val	Asp	Asn	Leu	65	70	75	
Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu	80	85	90	
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val	95	100	105	
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr	110	115	120	
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro	125	130	135	
Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp	140	145	150	

Ile Val His Lys	Ile Ala Ala Arg	Ile Tyr Glu Glu Asn Asp Arg	155	160	165
Ala Val Phe Asp	Lys Ile Val Ser Lys	Leu Leu Asn Leu Gly Leu	170	175	180
Ile Thr Glu Ser	Gln Ala His Thr Leu	Glu Asp Glu Val Ala Glu	185	190	195
Val Leu Gln Lys	Leu Ile Ser Lys Glu	Ala Asn Asn Tyr Glu Glu	200	205	210
Asp Pro Asn Lys	Pro Thr Ser Trp Thr	Glu Asn Gln Ala Gly Lys	215	220	225
Ile Pro Glu Lys	Val Thr Pro Met Ala	Ala Ile Gln Asp Gly Leu	230	235	240
Ala Lys Gly Glu	Asn Asp Glu Thr Val	Ser Asn Thr Leu Thr Leu	245	250	255
Thr Asn Gly Leu	Glu Arg Arg Thr Lys	Thr Tyr Ser Glu Asp Asn	260	265	270
Phe Glu Glu Leu	Gln Tyr Phe Pro Asn	Phe Tyr Ala Leu Leu Lys	275	280	285
Ser Ile Asp Ser	Glu Lys Glu Ala Lys	Glu Lys Glu Thr Leu Ile	290	295	300
Thr Ile Met Lys	Thr Leu Ile Asp Phe	Val Lys Met Met Val Lys	305	310	315
Tyr Gly Thr Ile	Ser Pro Glu Glu Gly	Val Ser Tyr Leu Glu Asn	320	325	330
Leu Asp Glu Met	Ile Ala Leu Gln Thr	Lys Asn Lys Leu Glu Lys	335	340	345
Asn Ala Thr Asp	Asn Ile Ser Lys Leu	Phe Pro Ala Pro Ser Glu	350	355	360
Lys Ser His Glu	Glu Thr Asp Ser Thr	Lys Glu Glu Ala Ala Lys	365	370	375
Met Glu Lys Glu	Tyr Gly Ser Leu Lys	Asp Ser Thr Lys Asp Asp	380	385	390
Asn Ser Asn Pro	Gly Gly Lys Thr Asp	Glu Pro Lys Gly Lys Thr	395	400	405
Glu Ala Tyr Leu	Glu Ala Ile Arg Lys	Asn Ile Glu Trp Leu Lys	410	415	420
Lys His Asp Lys	Lys Gly Asn Lys Glu	Asp Tyr Asp Leu Ser Lys	425	430	435
Met Arg Asp Phe	Ile Asn Lys Gln Ala	Asp Ala Tyr Val Glu Lys			

	440	445	450
Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr			
	455	460	465

Ser Ser Leu

<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151
 cggctcgagg ctcccgccag gagaaaggaa cattctgagg ggagtctaca 50
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 ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtggg 200
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 acactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350
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 gaactccctg ggcagagcca gtcgggtga ggggtgagtg gaggagaccc 600
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cagaagaaat ggctcgagct cagaagataa aagataagta gggatatgctg 1150
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gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300
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ctcagcctcc acttccccag agtaaattca aattgaatcg agctctgctg 1550
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cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750
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tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
gtcatgctgg atgaaggtag acctaaattc aatatgactg gtttccttgt 1900
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950
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agagactctg tgagataatc gatgtttgtt gttttaagtt gctcagtttt 2550

gggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

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Leu	Lys	Val	Leu	Tyr	Leu	His	Asn	Asn	Gln	Leu	Leu	Ala	Gly	Gly
				20					25					30
Leu	His	Ala	Gly	Lys	Val	Ile	Lys	Gly	Glu	Glu	Ile	Ser	Val	Val
				35					40					45
Pro	Asn	Arg	Trp	Leu	Asp	Ala	Ser	Leu	Ser	Pro	Val	Ile	Leu	Gly
				50					55					60
Val	Gln	Gly	Gly	Ser	Gln	Cys	Leu	Ser	Cys	Gly	Val	Gly	Gln	Glu
				65					70					75
Pro	Thr	Leu	Thr	Leu	Glu	Pro	Val	Asn	Ile	Met	Glu	Leu	Tyr	Leu
				80					85					90
Gly	Ala	Lys	Glu	Ser	Lys	Ser	Phe	Thr	Phe	Tyr	Arg	Arg	Asp	Met
				95					100					105
Gly	Leu	Thr	Ser	Ser	Phe	Glu	Ser	Ala	Ala	Tyr	Pro	Gly	Trp	Phe
				110					115					120
Leu	Cys	Thr	Val	Pro	Glu	Ala	Asp	Gln	Pro	Val	Arg	Leu	Thr	Gln
				125					130					135
Leu	Pro	Glu	Asn	Gly	Gly	Trp	Asn	Ala	Pro	Ile	Thr	Asp	Phe	Tyr
				140					145					150
Phe	Gln	Gln	Cys	Asp										
				155										

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

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ccctggccac cagctgcctc cttctcttgg ccctcttggt acagggagga 150
gcagctgcgc ccatcagctc ccaactgcagg cttgacaagt ccaacttcca 200
gcagccctat atcaccaacc gcaccttcat gctggctaag gaggctagct 250
tggtgataa caacacagac gtctgtctca ttggggagaa actgttccac 300

ggagtcagta tgagtgagcg ctgctatctg atgaagcagg tgctgaactt 350
 cacccttgaa gaagtgctgt tccctcaatc tgatagggtc cagccttata 400
 tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaagcaca 450
 tgtcatattg aagggtgatga cctgcatatc cagaggaatg tgcaaaagct 500
 gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattg 550
 gagaactgga tttgctgttt atgtctctga gaaatgcctg catttgacca 600
 gagcaaagct gaaaaatgaa taactaacc cctttccctg ctagaaataa 650
 caattagatg ccccaaagcg atttttttta accaaaagga agatgggaag 700
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 taagcataga tatttattga taacatttca ttgtaactgg tgttctatac 850
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 cattttattt atatcatttt attaatatgg atttatttat agaaacatca 1050
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 attatagagc tataacatgt ttatttgacc tcaataaaca cttggatata 1150
 cc 1152

<210> 154
 <211> 179
 <212> PRT
 <213> Homo Sapien

<400> 154
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 20 25 30
 Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
 35 40 45
 Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
 50 55 60
 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
 65 70 75
 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr

80										85					90				
Leu	Met	Lys	Gln	Val	Leu	Asn	Phe	Thr	Leu	Glu	Glu	Val	Leu	Phe					
				95					100					105					
Pro	Gln	Ser	Asp	Arg	Phe	Gln	Pro	Tyr	Met	Gln	Glu	Val	Val	Pro					
				110					115					120					
Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu					
				125					130					135					
Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp					
				140					145					150					
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly					
				155					160					165					
Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile						
				170					175										

<210> 155
 <211> 1320
 <212> DNA
 <213> Homo Sapien

<400> 155
 ggcttgctga aaataaaatc aggactccta acctgctcca gtcagcctgc 50
 ttccacgagg cctgtcagtc agtgcccgac ttgtgactga gtgtgcagtg 100
 cccagcatgt accaggtcag tgcagagggc tgcctgaggg ctgtgctgag 150
 agggagagga gcagagatgc tgctgagggg ggagggaggg caagctgcc 200
 gggttggggc tgggggccaa gtggagttag aaactgggat cccaggggga 250
 ggggtgcagat gagggagcga cccagattag gtgaggacag ttctctcatt 300
 agccttttcc tacagggtgt tgcattcttg gcaatgggtca tgggaaccca 350
 cacctacagc cactggccca gctgctgccc cagcaaaggg caggacacct 400
 ctgaggagct gctgaggtgg agcactgtgc ctgtgcctcc cctagagcct 450
 gctaggccca accgccacc agagtccctgt agggccagtg aagatggacc 500
 cctcaacagc agggccatct cccctggag atatgagttg gacagagact 550
 tgaaccggct ccccaggac ctgtaccacg cccgttgctt gtgcccgcac 600
 tgcgtcagcc tacagacagg ctcccatg gacccccggg gcaactcgga 650
 gctgctctac cacaaccaga ctgtcttcta caggcggcca tgccatggcg 700
 agaagggcac ccacaagggc tactgcctgg agcgcaggct gtaccgtgtt 750
 tccttagctt gtgtgtgtgt gcggccccgt gtgatgggct agccggacct 800

gctggaggct ggtccctttt tgggaaacct ggagccaggt gtacaaccac 850
 ttgccatgaa gggccaggat gccagatgc ttggcccctg tgaagtgctg 900
 tctggagcag caggatcccc ggacaggatg gggggctttg gggaaaaacct 950
 gcactttctgc acattttgaa aagagcagct gctgcttagg gccgccggaa 1000
 gctggtgtcc tgtcattttc tctcaggaaa ggttttcaaa gttctgcca 1050
 tttctggagg ccaccactcc tgtctcttcc tcttttccca tcccctgcta 1100
 ccctggccca gcacaggcac tttctagata tttccccctt gctggagaag 1150
 aaagagcccc tggttttatt tgtttgttta ctcactc agtgagcatc 1200
 tactttgggt gcattctagt gtagttacta gtcttttgac atggatgatt 1250
 ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300
 ctttatttaa aaatgaaaaa 1320

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser	1	5	10	15
Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr	20	25	30	
His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln	35	40	45	
Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro	50	55	60	
Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg	65	70	75	
Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp	80	85	90	
Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu	95	100	105	
Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr	110	115	120	
Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His	125	130	135	
Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly	140	145	150	

Thr His Lys Gly Tyr Cys Leu Glu Arg Arg Leu Tyr Arg Val Ser
 155 160 165

Leu Ala Cys Val Cys Val Arg Pro Arg Val Met Gly
 170 175

<210> 157

<211> 1515

<212> DNA

<213> Homo Sapien

<400> 157

ccggcgatgt cgctcgtgct gctaagcctg gccgcgctgt gcaggagcgc 50
 cgtaccccca gagccgaccg ttcaatgtgg ctctgaaact gggccatctc 100
 cagagtggat gctacaacat gatctaattc ccggagactt gagggacctc 150
 cgagtagaac ctgttacaac tagtggtgca acaggggact attcaatttt 200
 gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
 aggccaccaa gatttggtg acgggcaaaa gcaacttcca gtctacagc 300
 tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
 tgggtggtaaa tggacatttt cctacatcgg cttccctgta gagctgaaca 400
 cagtctattt cattggggcc cataatatcc ctaatgcaaa tatgaatgaa 450
 gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
 cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggata 550
 cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
 acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
 tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
 gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750
 cagctgactc catattttcc tacttggtggc agcgactgca tccgacataa 800
 aggaacagtt gtgctctgcc cacaacacagg cgccctttc cctctggata 850
 acaacaaaag caagccggga ggtggctgc ctctctctct gctgtctctg 900
 ctggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
 cgaaaggata aagaagactt cctttttctac caccacacta ctgcccccca 1000
 ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
 tggttacttca ctgaatttct tcaaaacat tgcagaagtg aggtcatcct 1100
 tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150

ttgccactca aaagaaggca gcagacaaag tcgtcttcct tctttccaat 1200
 gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagtc 1250
 cagtgagaac tctcaagacc tcttccccct tgcctttaac cttttctgca 1300
 gtgatctaag aagccagatt catctgcaca aatacgtggt ggtctacttt 1350
 agagagattg atacaaaaga cgattacaat gctctcagtg tctgccccaa 1400
 gtaccacctc atgaaggatg ccactgcttt ctgtgcagaa cttctccatg 1450
 tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
 tgctgctcct tgtag 1515

<210> 158
 <211> 502
 <212> PRT
 <213> Homo Sapien

<400> 158
 Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala
 1 5 10 15
 Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro
 20 25 30
 Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
 35 40 45
 Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
 50 55 60
 Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
 65 70 75
 Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
 80 85 90
 Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
 95 100 105
 Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr
 110 115 120
 Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
 125 130 135
 Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
 140 145 150
 Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
 155 160 165
 Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
 170 175 180

Asp	Pro	Asn	Ile	Thr	Ala	Cys	Lys	Lys	Asn	Glu	Glu	Thr	Val	Glu		185	190	195
Val	Asn	Phe	Thr	Thr	Thr	Pro	Leu	Gly	Asn	Arg	Tyr	Met	Ala	Leu		200	205	210
Ile	Gln	His	Ser	Thr	Ile	Ile	Gly	Phe	Ser	Gln	Val	Phe	Glu	Pro		215	220	225
His	Gln	Lys	Lys	Gln	Thr	Arg	Ala	Ser	Val	Val	Ile	Pro	Val	Thr		230	235	240
Gly	Asp	Ser	Glu	Gly	Ala	Thr	Val	Gln	Leu	Thr	Pro	Tyr	Phe	Pro		245	250	255
Thr	Cys	Gly	Ser	Asp	Cys	Ile	Arg	His	Lys	Gly	Thr	Val	Val	Leu		260	265	270
Cys	Pro	Gln	Thr	Gly	Val	Pro	Phe	Pro	Leu	Asp	Asn	Asn	Lys	Ser		275	280	285
Lys	Pro	Gly	Gly	Trp	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Val		290	295	300
Ala	Thr	Trp	Val	Leu	Val	Ala	Gly	Ile	Tyr	Leu	Met	Trp	Arg	His		305	310	315
Glu	Arg	Ile	Lys	Lys	Thr	Ser	Phe	Ser	Thr	Thr	Thr	Leu	Leu	Pro		320	325	330
Pro	Ile	Lys	Val	Leu	Val	Val	Tyr	Pro	Ser	Glu	Ile	Cys	Phe	His		335	340	345
His	Thr	Ile	Cys	Tyr	Phe	Thr	Glu	Phe	Leu	Gln	Asn	His	Cys	Arg		350	355	360
Ser	Glu	Val	Ile	Leu	Glu	Lys	Trp	Gln	Lys	Lys	Lys	Ile	Ala	Glu		365	370	375
Met	Gly	Pro	Val	Gln	Trp	Leu	Ala	Thr	Gln	Lys	Lys	Ala	Ala	Asp		380	385	390
Lys	Val	Val	Phe	Leu	Leu	Ser	Asn	Asp	Val	Asn	Ser	Val	Cys	Asp		395	400	405
Gly	Thr	Cys	Gly	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Glu	Asn	Ser	Gln		410	415	420
Asp	Leu	Phe	Pro	Leu	Ala	Phe	Asn	Leu	Phe	Cys	Ser	Asp	Leu	Arg		425	430	435
Ser	Gln	Ile	His	Leu	His	Lys	Tyr	Val	Val	Val	Tyr	Phe	Arg	Glu		440	445	450
Ile	Asp	Thr	Lys	Asp	Asp	Tyr	Asn	Ala	Leu	Ser	Val	Cys	Pro	Lys		455	460	465
Tyr	His	Leu	Met	Lys	Asp	Ala	Thr	Ala	Phe	Cys	Ala	Glu	Leu	Leu				

	470	475	480
His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys			
	485	490	495

His Asp Gly Cys Cys Ser Leu
500

<210> 159
<211> 535
<212> DNA
<213> Homo Sapien

<400> 159
agccaccagc gcaacatgac agtgaagacc ctgcatggcc cagccatggt 50
caagtacttg ctgctgtcga tattggggct tgcctttctg agtgaggcgg 100
cagctcggaa aatccccaaa gtaggacata cttttttcca aaagcctgag 150
agttgcccgc ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200
caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
cctccccctg gaattacact gtcacttggg accccaaccg gtaccctcgc 300
gaagttgtac aggcccagtg taggaacttg ggctgcatca atgctcaagg 350
aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400
tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450
gtgctggtga ctgttggtg cactgcgtc acccctgtca tccaccatgt 500
gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160
<211> 163
<212> PRT
<213> Homo Sapien

<400> 160
Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu
1 5 10 15
Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala
20 25 30
Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu
35 40 45
Ser Cys Pro Pro Val Pro Gly Gly Ser Met Lys Leu Asp Ile Gly
50 55 60
Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu
65 70 75
Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro

80										85					90				
Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu					
				95					100					105					
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser					
				110					115					120					
Val	Pro	Ile	Gln	Gln	Glu	Thr	Leu	Val	Val	Arg	Arg	Lys	His	Gln					
				125					130					135					
Gly	Cys	Ser	Val	Ser	Phe	Gln	Leu	Glu	Lys	Val	Leu	Val	Thr	Val					
				140					145					150					
Gly	Cys	Thr	Cys	Val	Thr	Pro	Val	Ile	His	His	Val	Gln							
				155					160										

<210> 161
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 161
 acactggcca aacaaaaacg aaagcactcc gtgctggaag taggaggaga 50
 gtcaggactc ccaggacaga gagtgcacaa actaccacgc acagccccct 100
 ccgccccctc tggaggctga agagggattc cagccccctgc caccacaga 150
 cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200
 ctcaggcctg ggtgccacct ggcacctaga agatgcctgt gccttggttc 250
 ttgctgtcct tggcactggg ccgaagccca gtggtccttt ctctggagag 300
 gcttgtgggg cctcaggacg ctaccactg ctctccgggc ctctcctgcc 350
 gcctctggga cagtgcata ctctgcctgc ctggggacat cgtgcctgct 400
 ccgggccccg tgctggcgcc tacgcacctg cagacagagc tgggtgtgag 450
 gtgccagaag gagaccgact gtgacctctg tctgcgtgtg gctgtccact 500
 tggccgtgca tgggcactgg gaagagcctg aagatgagga aaagtttgga 550
 ggagcagctg actcaggggt ggaggagcct aggaatgcct ctctccaggc 600
 ccaagtctg ctctccttcc aggccctacc tactgcccgc tgcgtcctgc 650
 tggagggtgca agtgcctgct gcccttggtc agtttggtca gtctgtgggc 700
 tctgtggtat atgactgctt cgaggctgcc ctaggagtg aggtacgaat 750
 ctggtcctat actcagccca ggtacgagaa ggaactcaac cacacacagc 800
 agctgcctgc cctgccctgg ctcaacgtgt cagcagatgg tgacaacgtg 850
 catctggttc tgaatgtctc tgaggagcag cacttcggcc tctccctgta 900

ctggaatcag gtccagggcc ccccaaaacc ccggtggcac aaaaacctga 950
 ctggaccgca gatcattacc ttgaaccaca cagacctggt tccctgcctc 1000
 tgtattcagg tgtggcctct ggaacctgac tccgttagga cgaacatctg 1050
 ccccttcagg gaggaccccc gcgcacacca gaacctctgg caagccgccc 1100
 gactgcgact gctgaccctg cagagctggc tgctggacgc accgtgctcg 1150
 ctgcccgcag aagcggcact gtgctggcgg gctccgggtg gggaccctg 1200
 ccagccactg gtcccaccgc tttcctggga gaacgtcact gtggacaagg 1250
 ttctcgagtt ccattgctg aaaggccacc ctaacctctg tgttcagggtg 1300
 aacagctcgg agaagctgca gctgcaggag tgcttggtgg ctgactccct 1350
 ggggcctctc aaagacgatg tgctactggt ggagacacga ggccccagg 1400
 acaacagatc cctctgtgcc ttggaacca gtggctgtac ttcactacc 1450
 agcaaagcct ccacgagggc agctcgcctt ggagagtact tactacaaga 1500
 cctgcagtca ggccagtgtc tgcagctatg ggacgatgac ttgggagcgc 1550
 tatgggcctg ccccatggac aaatacatcc acaagcgtg ggcctcgtg 1600
 tggtggcct gcctactctt tgccgtgcg ctttccctca tcctcctct 1650
 caaaaaggat cacgcgaaag ggtggctgag gctcttgaaa caggacgtcc 1700
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 ccagctgccg ctgcgcgtgg ccgtagacct gtggagccgt cgtgaactga 1850
 gcgcgcaggg gcccggtggc ttggtttcacg cgcagcggcg ccagaccctg 1900
 caggagggcg gcgtggtggt cttgctcttc tctcccggtg cgggtggcgt 1950
 gtgcagcgag tggtacagg atggggtgtc cgggcccggg gcgcacggcc 2000
 cgcacgacgc cttccgcgcc tcgctcagct gcgtgctgcc cgacttcttg 2050
 cagggcgggg cgcccggcag ctacgtgggg gcctgcttcg acaggctgct 2100
 ccaccggac gccgtaccg cccttttccg caccgtgcc gtcttcacac 2150
 tgccctccca actgccagac ttctggggg ccctgcagca gcctcgcgcc 2200
 ccgcgttccg ggcggctcca agagagagcg gagcaagtgt cccgggccct 2250
 tcagccagcc ctggatagct acttccatcc cccggggact cccgcgccg 2300
 gacgcggggg gggaccagg gcgggacctg gggcggggga cgggacttaa 2350

ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met	Pro	Val	Pro	Trp	Phe	Leu	Leu	Ser	Leu	Ala	Leu	Gly	Arg	Ser	
1				5					10					15	
Pro	Val	Val	Leu	Ser	Leu	Glu	Arg	Leu	Val	Gly	Pro	Gln	Asp	Ala	
			20						25					30	
Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp	
			35						40					45	
Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val	
			50						55					60	
Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln	
			65						70					75	
Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu	
			80						85					90	
Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe	
			95						100					105	
Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser	
			110						115					120	
Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala	
			125						130					135	
Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln	
			140						145					150	
Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala	
			155						160					165	
Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg	
			170						175					180	
Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro	
			185						190					195	
Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu	
			200						205					210	
Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn	
			215						220					225	
Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr	
			230						235					240	
Gly	Pro	Gln	Ile	Ile	Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys	
			245						250					255	

Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr	260	265	270
Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu	275	280	285
Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu	290	295	300
Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp	305	310	315
Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu	320	325	330
Ser Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu	335	340	345
Leu Lys Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu	350	355	360
Lys Leu Gln Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro	365	370	375
Leu Lys Asp Asp Val Leu Leu Leu Glu Thr Arg Gly Pro Gln Asp	380	385	390
Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu	395	400	405
Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu	410	415	420
Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp	425	430	435
Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr Ile His	440	445	450
Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala Ala	455	460	465
Ala Leu Ser Leu Ile Leu Leu Leu Lys Lys Asp His Ala Lys Gly	470	475	480
Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser Gly Ala Ala Ala	485	490	495
Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp Asp Ser Gly	500	505	510
Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu	515	520	525
Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser	530	535	540
Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr			

545	550	555
Leu Gln Glu Gly Gly Val Val Val Leu	Leu Phe Ser Pro Gly Ala	
560	565	570
Val Ala Leu Cys Ser Glu Trp Leu Gln	Asp Gly Val Ser Gly Pro	
575	580	585
Gly Ala His Gly Pro His Asp Ala Phe	Arg Ala Ser Leu Ser Cys	
590	595	600
Val Leu Pro Asp Phe Leu Gln Gly Arg	Ala Pro Gly Ser Tyr Val	
605	610	615
Gly Ala Cys Phe Asp Arg Leu Leu His	Pro Asp Ala Val Pro Ala	
620	625	630
Leu Phe Arg Thr Val Pro Val Phe Thr	Leu Pro Ser Gln Leu Pro	
635	640	645
Asp Phe Leu Gly Ala Leu Gln Gln Pro	Arg Ala Pro Arg Ser Gly	
650	655	660
Arg Leu Gln Glu Arg Ala Glu Gln Val	Ser Arg Ala Leu Gln Pro	
665	670	675
Ala Leu Asp Ser Tyr Phe His Pro Pro	Gly Thr Pro Ala Pro Gly	
680	685	690
Arg Gly Val Gly Pro Gly Ala Gly Pro	Gly Ala Gly Asp Gly Thr	
695	700	705

<210> 163
 <211> 2478
 <212> DNA
 <213> Homo Sapien

<400> 163
 gtcagtgcgg gaggcgggtc agccaccaag atgactgaca gggttcagctc 50
 tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag 100
 tgagatcgat tcagatgatt gttcatccta cccccacgcc aatccgtgca 150
 ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200
 ccacttagag ctccaggtca accgcaccta ccaaatgcac cttggaggga 250
 agcagagaga atatgagttc ttccggcctga cccctgacac agagttcctt 300
 ggcaccatca tgatttgctt tcccacctgg gcccaaggaga gtgcccccta 350
 catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400
 ccggagcctt cctgttctcc atgggcttcc tcgtcgcagt actctgctac 450
 ctgagctaca gatatgtcac caagccgcct gcacctccca actccctgaa 500

cgtccagcga gtcttgactt tccagccgct gcgcttcate caggagcacg 550
 tcttgatccc tgtctttgac ctcagcggcc ccagcagtct ggcccagcct 600
 gtccagtact ccagatcag ggtgtctgga ccaggggagc ccgcaggagc 650
 tccacagcgg catagcctgt ccgagatcac ctacttaggg cagccagaca 700
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 acctcaggtg acccccgaag ctcaattccc attctacgcc ccacaggcca 850
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 agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgcag 1050
 gaggtgacct ccttggtat ggaggaatcc caagaagcaa aatcattgca 1100
 ccagccctg gggatttgca cagacagaac atctgacca aatgtgtac 1150
 acagtgggga ggaagggaca ccacagtacc taaagggccca gctccccctc 1200
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 tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400
 tcatgtcttt aaagtgctta atagtgcctg gtacatgggc agtgcccaat 2450
 aaacggtagc tatttaaaaa aaaaaaaaa 2478

<210> 164
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 164

Met	Arg	Thr	Leu	Leu	Thr	Ile	Leu	Thr	Val	Gly	Ser	Leu	Ala	Ala
1				5					10					15
His	Ala	Pro	Glu	Asp	Pro	Ser	Asp	Leu	Leu	Gln	His	Val	Lys	Phe
				20					25					30
Gln	Ser	Ser	Asn	Phe	Glu	Asn	Ile	Leu	Thr	Trp	Asp	Ser	Gly	Pro
				35					40					45
Glu	Gly	Thr	Pro	Asp	Thr	Val	Tyr	Ser	Ile	Glu	Tyr	Lys	Thr	Tyr
				50					55					60
Gly	Glu	Arg	Asp	Trp	Val	Ala	Lys	Lys	Gly	Cys	Gln	Arg	Ile	Thr
				65					70					75
Arg	Lys	Ser	Cys	Asn	Leu	Thr	Val	Glu	Thr	Gly	Asn	Leu	Thr	Glu
				80					85					90
Leu	Tyr	Tyr	Ala	Arg	Val	Thr	Ala	Val	Ser	Ala	Gly	Gly	Arg	Ser
				95					100					105
Ala	Thr	Lys	Met	Thr	Asp	Arg	Phe	Ser	Ser	Leu	Gln	His	Thr	Thr
				110					115					120
Leu	Lys	Pro	Pro	Asp	Val	Thr	Cys	Ile	Ser	Lys	Val	Arg	Ser	Ile
				125					130					135
Gln	Met	Ile	Val	His	Pro	Thr	Pro	Thr	Pro	Ile	Arg	Ala	Gly	Asp
				140					145					150

Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr	155	160	165
His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly	170	175	180
Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr	185	190	195
Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys	200	205	210
Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp Arg	215	220	225
Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly	230	235	240
Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr	245	250	255
Lys Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu	260	265	270
Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro	275	280	285
Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln	290	295	300
Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala	305	310	315
Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro	320	325	330
Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro Gln Ile	335	340	345
Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val Gly	350	355	360
Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro	365	370	375
Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr	380	385	390
Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro Pro Ser Tyr Gly Val	395	400	405
Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr Gly Thr Leu Ser	410	415	420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro	425	430	435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val			

440	445	450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His		
455	460	465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val		
470	475	480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln		
485	490	495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser		
500	505	510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln		
515	520	525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys		
530	535	540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln		
545	550	555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val		
560	565	570
Gln Trp Glu Ser		

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
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 gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100
 ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
 gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
 tgtaccgtgg gaaagctctt gaagacttca cggggccctga ttgtcgtttt 250
 gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
 gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
 ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400
 catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
 tgattttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
 aggactctgt acctgaagag tcgaagaaaag ctgaagaagt ttctcagcac 550
 agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600

tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
 cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
 cctcacacca gcggtcctgc ggctaacgct cagggagtgct agtcttcggt 750
 ggacactttt gaagaaattc tgcacgataa attgaaagtg ccggaagcg 800
 aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
 gatgcttaca aagtcctgaa aacagaaatg agtcagagag gaagtggaca 900
 gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
 tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
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 aaaaaaaaaa 1060

<210> 166

<211> 303

<212> PRT

<213> Homo Sapien

<400> 166

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Phe	Trp	Leu	Phe	Val	Leu	Gly	1	5	10	15
Ala	Leu	Trp	Trp	Val	Pro	Gly	Gln	Ser	Asp	Leu	Ser	His	Gly	Arg	20	25	30	
Arg	Phe	Ser	Asp	Leu	Lys	Val	Cys	Gly	Asp	Glu	Glu	Cys	Ser	Met	35	40	45	
Leu	Met	Tyr	Arg	Gly	Lys	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp	50	55	60	
Cys	Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Asp	Val	Tyr	Val	Tyr	65	70	75	
Tyr	Lys	Leu	Ala	Gly	Gly	Ser	Leu	Glu	Leu	Trp	Ala	Gly	Ser	Val	80	85	90	
Glu	His	Ser	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Lys	Val	Leu	95	100	105	
His	Lys	Tyr	Thr	Glu	Glu	Glu	Leu	His	Ile	Pro	Ala	Asp	Glu	Thr	110	115	120	
Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr	125	130	135	
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val	140	145	150	
Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu	155	160	165	

Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro
 170 175 180
 Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala
 185 190 195
 Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln
 200 205 210
 Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly
 215 220 225
 Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys
 230 235 240
 Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro
 245 250 255
 Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys
 260 265 270
 Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr
 275 280 285
 Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys
 290 295 300

Asp Cys Phe

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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 tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acagggcgcg 200
 caggcggcag gtcccggccg aaggcgatgc gcgcaggggg tcgggcagct 250
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 attcagagtc gcgggctgcg ccctgggcag aggcgcacct cgctccacgc 350
 aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgtctgct 400
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 tcagcggcca aaaggtgtgt tttgctgact tcaagcatcc ctgctacaaa 500
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cctggcttgt gagagtgagg gaggagtcct cctcagcctt gagaatgaag 600
cagaacagaa gttaatagag agcatgttgc aaaacctgac aaaacccggg 650
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<210> 168

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

Met	Ser	Arg	Val	Val	Ser	Leu	Leu	Leu	Gly	Ala	Ala	Leu	Leu	Cys
1				5					10					15

Gly	His	Gly	Ala	Phe	Cys	Arg	Arg	Val	Val	Ser	Gly	Gln	Lys	Val
				20					25					30

Cys	Phe	Ala	Asp	Phe	Lys	His	Pro	Cys	Tyr	Lys	Met	Ala	Tyr	Phe
				35					40					45

His	Glu	Leu	Ser	Ser	Arg	Val	Ser	Phe	Gln	Glu	Ala	Arg	Leu	Ala
				50					55					60

Cys	Glu	Ser	Glu	Gly	Gly	Val	Leu	Leu	Ser	Leu	Glu	Asn	Glu	Ala
				65					70					75

Glu	Gln	Lys	Leu	Ile	Glu	Ser	Met	Leu	Gln	Asn	Leu	Thr	Lys	Pro
				80					85					90

Gly	Thr	Gly	Ile	Ser	Asp	Gly	Asp	Phe	Trp	Ile	Gly	Leu	Trp	Arg
				95					100					105

Asn	Gly	Asp	Gly	Gln	Thr	Ser	Gly	Ala	Cys	Pro	Asp	Leu	Tyr	Gln
				110					115					120

Trp	Ser	Asp	Gly	Ser	Asn	Ser	Gln	Tyr	Arg	Asn	Trp	Tyr	Thr	Asp
				125					130					135

Glu	Pro	Ser	Cys	Gly	Ser	Glu	Lys	Cys	Val	Val	Met	Tyr	His	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

140	145	150
Pro Thr Ala Asn	Pro Gly Leu Gly Gly	Pro Tyr Leu Tyr Gln Trp
155	160	165
Asn Asp Asp Arg	Cys Asn Met Lys His	Asn Tyr Ile Cys Lys Tyr
170	175	180
Glu Pro Glu Ile	Asn Pro Thr Ala Pro	Val Glu Lys Pro Tyr Leu
185	190	195
Thr Asn Gln Pro	Gly Asp Thr His Gln	Asn Val Val Val Thr Glu
200	205	210
Ala Gly Ile Ile	Pro Asn Leu Ile Tyr	Val Val Ile Pro Thr Ile
215	220	225
Pro Leu Leu Leu	Leu Ile Leu Val Ala	Phe Gly Thr Cys Cys Phe
230	235	240
Gln Met Leu His	Lys Ser Lys Gly Arg	Thr Lys Thr Ser Pro Asn
245	250	255
Gln Ser Thr Leu	Trp Ile Ser Lys Ser	Thr Arg Lys Glu Ser Gly
260	265	270
Met Glu Val		

<210> 169
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 169
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<210> 170
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 170
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